Introductory Address

DELIVERED AT

ST. GEORGE'S HOSPITAL,

October 1st, 1875.

BY ROBERT BARNES, M.D.

IT is generally felt that the hardest duty that can be allotted to a teacher is to make him give the "Introductory" on the opening of the medical session. The feeling therefore with which I accept the honour awarded to me is not one of gratitude without alloy. At the same time I cordially acknowledge the graceful and kindly courtesy which prompted my colleagues thus to initiate my return as a teacher to the school in which I am proud to have been a student. I have been a vagabond over London dragging at each remove a lengthening chain, but still, holding on by the instinct of affection, it has brought me home at last.

One of the penalties of my wandering career is that I am now called upon to give my third "Introductory." The difficulty of acquitting oneself becomingly is not, I am afraid, diminished by experience. The choice of a theme becomes more contracted, and the difficulty of illustrating the theme that may be chosen is increased by the conditions under which these addresses are now delivered. Not many years ago the introductory lecture was a purely intra-academical discourse. It was almost invariably confined to historical disquisition, to praise of one's own school, to an exposition of the curriculum of medical study, concluding with a homily to the students on the text of diligence and good behaviour. All of this is somewhat trite; and the homily I venture to say is a work of supererogation. But with the rapid advance of medical knowledge, and its consequent extending influence upon legislation, statutory and administrative, medical education and the preceedings of our medical colleges are now invested with a degree of public interest previously unknown. Altered circumstances, therefore, seem to invite, if not to compel, those who have to give these addresses to select for their theme some of the wider and more general aspects of medicine; to endeavour to point out some of the relations of medicine to the public good; to expose some of the defects in the construction or administration of our laws that hinder the just and beneficent application of science to the public service. Thus, we may suggest to you some idea of the higher aims of the profession you have chosen, of the position you will occupy in relation to other professions and to society at large, and of the duties that devolve upon you in maintaining and extending that influence upon which the future welfare of mankind so largely depends. What was once called the "healing art" has now a far greater sphere than the term expresses. Medicine in its modern sense and work is "preventive" as well as "healing." Medicine is no longer simply an art directed to the alleviation or cure of individual suffering. Applied to the task of aiding in the administration of justice, of removing the causes of disease, of restricting or annihilating epidemics, of increasing the sum of national health, it becomes a moving power in government. State-Medicine then is the offspring and the complement of the "healing art."

An education framed in such a manner as to prepare men for duties so vast and so important must be comprehensive in its range, accurate in its method. Medicine deals especially with the phenomena of life. But since life depends upon or is influenced by external conditions, biology is impossible without a fair knowledge of physics. These two departments of knowledge are the foundation and the glory of medicine. The study of them, directed to a practical application—the health and happiness of man—constitutes an education superior to that pursued by any other profession. It is superior in the range and precision of its knowledge; it is superior as an organon for the training of the intellect; it is not inferior in the formation of the higher moral attributes.

That which distinguishes modern medical education is its accuracy. The application of instruments of precision, as the thermometer, the sphygmograph, the stethoscope, the ophthalmoscope, the laryngoscope, and other contrivances for extending sensual perceptions into the interior of the body, together with microscopical and chemical analysis, enable us to observe, to record, and to compare the phenomena of health and disease to such a degree as to bring medicine nearer and nearer to the rank of an exact science.

Medical education possesses this inestimable advantage: its foundations are laid deep and wide in objective study. It is first circumspective, then introspective. It rests upon observation. And yet it does not exclude the play of the imagination. Without this divine faculty we should have few discoveries; and every page of the history of medicine glows with brilliant discoveries. But still the chaotic materials which imagination forges into laws are the fruit of laborious observation. And these laws are being continually tried by the test of fresh observation. Medical science is being incessantly extended and corrected by the interrogation of nature. And nature rarely refuses an answer to the patient and humble inquirer. It is in this court of appeal, always open, that the strength of medicine lies; the source of her controlling power over the schools of theology and law. I should be loth to utter one word of disrespect towards the sister faculties. Society could not exist without religion and without law. But I hope to be forgiven for pointing out that both religion and law will be strengthened the more they are brought into harmony with science. Each is the complement of the other two. But the day has come when science must lead. The last-born, perhaps, now that the day of her emancipation has arrived, the most vigorous, the most progressive, and therefore destined to exercise the greatest sway in the future. Theology and law are in their essence stagnant. Religion is wholly revealed. Presumption alone can add anything to its sublime and simple truth. Law, when not informed and vivified by science, is dogmatic—the slave of authority seeking a solution of its doubts in precedent, which is too often nothing more than error upon error crystallised by time. And so it must be with an almost purely subjective study. Deriving the bulk of his knowledge from oral or written tradition, the lawyer, according to the bent of his organisation, assimilates what he learns—makes it a part of himself. It thus undergoes a subjective transformation. And since men's minds differ in their constitution and construction, there results an infinite diversity of opinions, whilst there is no appeal but to the opinions of those who have gone before, and who from that very circumstance are more likely to be wrong than themselves. Hence those incessant conflicts in our law-courts, those frequent reversals of the decisions of one civil court by another, which are the despair of the uninitiated. If there were a court of appeal in criminal cases, reversals would probably be no less frequent; and still greater would be the difficulty of the Irishman, who, when asked to plead Guilty or Not guilty, replied, "'Faith, how do I know till I'm tried." Recently the Legislature has decreed certain changes in the machinery and proceedings of the law. I dare not, with profane hand, touch this mystery of mysteries. Let us hope that the changes will result in more speedy justice and diminished bills of costs.

Since the function assumed by the law is not to add to human knowledge, and since laws must in the end be brought into harmony with knowledge, it might be expected that law-makers and law-administrators would accept with more deference than is often shown the teachings of those who have made science the occupation of their lives. The obvious objection urged is, that the teachings of science are themselves conflicting. But it is equally obvious that those who make science their study are more likely to be right on questions of science than those who trust to their common sense. As Whately put it: no one would trust himself to navigate a ship by common sense. The skilled sailor may sometimes founder, but the rash landsman is pretty sure to come to grief. Still, making full allowance for the necessity of caution, admitting that science must always be in advance of law, we may not unreasonably complain that law lags so very far behind; that it limps along with such hesitating step.

There are certain flaws, which are a real discredit to the

law, which involve inconsistencies so gross as to be revolting not alone to the scientific mind but to the sense of the community. Of these, let me instance the well-known practice when pregnancy is pleaded in bar of execution. The law directs that the prisoner shall be examined, not alone as to the bare fact of pregnancy—in itself sometimes no easy task for a skilled physician,—but also as to whether she is "quick" with child. This latter fact it is often impossible to determine. In the first place, the so-called "quickening" is with many women an entirely subjective phenomenon—a sensation they think they perceive, but which is not perceptible by others. She may affirm that she is conscious of having quickened, and the examiner is not in a position to refute her assertion because he or she may not obtain objective proof. In the next place, some women never consciously quicken at all, and the examiner may equally fail to get evidence of the event. And many women quicken, or think they do, who are not pregnant. Again, the movement or impulse felt by the examiner, and which is presumed to be proof of a "quick" child, is often fallacious. The late Dr. Tyler Smith insisted that the movements felt by the mother and by the examiner were not produced by the child, but by the womb itself; and it is now known that these movements of the womb can be detected before the earliest period assigned for the quickening of the child.

We ought perhaps logically to begin by defining the condition of being "quick with child." Lawyers, I am afraid, sometimes find a malicious pleasure in pressing scientific witnesses for a definition. No skilled witness would, I venture to say, attempt to define this condition. It is a legal fiction, not a natural fact. The burthen of definition, then, rests with the lawyer. It is absurd for him to appeal to science for an answer. The legal definition is, I believe, as follows: "The term," says Taylor, "is derived from the old Saxon word 'quick,' signifying living; as, at the time when medical science was in its infancy, it was considered that the fœtus only received vitality when the mother experienced the sensation of its motion"! I need not point out the shocking absurdity of this doctrine. I cannot suppose that any lawyer now believes in it. But the law exists; so that we are driven to conclude that those who keep it on the statute-book respect the law more than the truth. But the climax of absurdity is reached when the determination of this abstruse problem, this impossible fact, is left to twelve matrons who may happen to be in Court. As Dr. Leake irreverently observed, the judge who should call upon twelve old women to execute this function must himself be an old woman. But I have known it done twice; and twice did the discreet matrons declare the prisoner "not quick with child"; and twice did skilled examination, and time, the solver of mysteries, prove that the prisoner's plea was good.

After all, then, it may be answered, the appeal was made to science in time, and no harm was done. The law directs the judge to empannel a jury of matrons, but does not preclude him or the Secretary of State from referring the decision to an expert. I do not believe that a pregnant woman, who pleads her pregnancy, will ever again be hanged on the verdict of a jury of matrons, unless, indeed, we are destined to see juries of matrons selected from legally qualified "medical women." This may happen when Macaulay's Lord Chancellor will be sitting on the woolsack with twins in her lap. Let us hope not before.

But the absurdity, the barbarity of the law in this relation does not end here. The law of England makes it felony to attempt to procure abortion. All right-minded persons will admit the wisdom, the justice, the necessity of this provision. But then see how lamentable is the inconsistency of the law. It declares that a pregnant woman may be hanged; it makes it felony to attempt to procure abortion. Justice in this case sanctions, nay, commits homicide and fœticide; and with blind inconsistency punishes those who are guilty of the simple attempt to procure abortion. It is scarcely an extenuation to urge that the shocking consequences that would result if the letter of the law were rigorously carried out are practically avoided. It is no small evil that a law representing ignorance so gross should disfigure the statute-book, and that practice so clumsy and ridiculous should stain the records of our courts. The indirect influence of authorised error cannot fail to be pernicious. When the judges thus sanction the theory that the embryo in its early stage has no life, and may be treated as non-existent, how can it be expected that the ignorant masses will look upon the procuring abortion as a crime? This most deplorable doctrine is not accepted in other countries.

There are other questions connected with this subject which scarcely appear to have been contemplated by the law, and which in the interest of humanity and justice ought to be considered. We have seen that a woman may be pregnant and not know it; thus, not pleading her pregnancy, she may be hanged, and the intention or the spirit of the law is frustrated. Again, a prisoner may be pregnant, and, knowing it, suppress the fact, suffer herself to be hanged without pleading; and thus again is the spirit of the law frustrated.

Here we are brought face to face with another relic of the age of ignorance which is still held in bigoted veneration. The irresponsibility of the insane is a question that is continually giving rise to the most painful discussions and the most conflicting decisions in our courts. In all civilised countries it is a fundamental rule that responsibility is the attribute of reason, and, therefore, that insanity implies irresponsibility. In its dealing with this admitted principle the courts practically abrogate the law. The judges, many years ago, in deliberation, put a definition upon the law, upon which their successors still hold themselves bound to act. This definition virtually declares that insanity does not carry irresponsibility. Their faith in the wisdom of their predecessors is absolute; their contempt for the teaching of modern science is unbounded. On a recent trial the learned judge (Brett) thus charged the jury:—"It was not sufficient to show that the prisoner was insane, unless it was also shown that he did not know the nature of the act he was committing, or did not know that it was wrong. The jury must disabuse their minds of the medical notions as to insanity, for the reason that these medical men had not met the court upon the ground which they desired them to do, and that their opinions were founded on their own ideas as to what the law of insanity ought to be." Notwithstanding this charge, the jury, without any hesitation, found the prisoner not guilty, on the ground of insanity.

The late Lord Campbell once said to a distinguished physician, who was giving evidence in a case of insanity, and who had been obliged to use the term "homicidal insanity": "Homicidal insanity! I will not allow those words to be used in my presence!" But this emphatic judicial repudiation did not alter in the slightest degree the fact of the existence of a type of mental derangement which manifests itself by homicidal propensities, and which psychologists will, until they discover a better name, continue to designate "homicidal insanity." But another Lord Chancellor went beyond this. After the Windham commission, he actually proposed to exclude medical evidence in commissions of lunacy, except in so far as it was based on *facts* within the personal knowledge of the witnesses.

Primâ facie, to establish insanity is to establish irresponsibility. Upon medical science it falls to make good this *primâ facie* case. And, having done this, the universal contention of those who have made lunatics and insanity their study, by clinical observation and other methods of research, is that they have done enough. They know the absurdity of attempting to reconcile reason and unreason, health and disease; they know that insanity, where it exists, alters the whole man; they know that a diseased organ cannot work healthily. Observation tells them that man, complex though he be, cannot be sane and insane—that is, responsible and irresponsible, at the same moment. Cases, indeed, there are, but they are not common, in which monomaniacs, as they are called, may appear sane until their particular delusion is hit; but it is a gross and dangerous, albeit a popular, error, to conclude that these persons are really sound even in part. They are more or less under the dominion of their craze; it underruns the whole current of their thoughts; it may at any moment sway them irresistibly. Surely the creed of phrenology is the foundation of the legal doctrine of coexistent sanity and insanity. If we suppose the mind to be made up of distinct faculties, as perception, comparison, volition, and so forth, each faculty having its own separate organ, it is possible to conceive that one of these faculties may suffer alone when its particular

piece of brain is diseased. Lawyers, then, are phrenologists. I do not know whether they will accept this suggestion. It is, however, the best explanation that can be offered of their theory. True science repudiates it. They treat insanity as a purely metaphysical subject. They disregard the dependence of the mind upon the state of the brain. In Carlyle's "Sartor Resartus" is a world of wisdom. If the outward apparel of a man can sway his thoughts and character, how much more then will the condition of the brain and nervous system, upon which perception and reason depend, influence the mind. The metaphysical method of studying the aberrations of the mind is about as reasonable as were the speculations of the ancients upon the circulation of the blood and disorders of the heart before the discovery of Harvey. The basis of all sound knowledge of insanity must be anatomy, physiology, and clinical observation. To neglect this is to flounder in hopeless error.

What the judges declared to be the law, was not really the law, but their arbitrary interpretation of it. We may claim the liberty to question whether this interpretation be the just one. It hangs upon an impossible postulate. No man who has been at one time sane, and therefore trained in accordance with the modes of thought of his fellowmen, can, even on becoming insane, be freed altogether from the influence of that training. The sense that killing is wrong may remain. It is transcendently absurd to look for a man so demented as not to know that striking another man on the head with an adze is likely to injure or kill him. Such a man can hardly be found in a lunatic asylum; and, *à fortiori*, can hardly be found out of one. He is a creation, not of nature, but a legal figment. Carried to its legitimate applications, the legal doctrine would simply abrogate the law of irresponsibility on the ground of insanity. The doctrine, then, must be revised by the light of science; for assuredly juries will continue to reject it. In spite of strong dictatorial charges, it is becoming practically obsolete. It must at no distant date be given up even by the lawyers.

The doctrine that it is right to punish, even to hang, madmen according to their knowledge of right and wrong, ought, in its logical application, to embrace a graduated scale of responsibility and penalties. The attempt to define the degrees in this scale will hardly be undertaken even by the trained analytical subtlety of lawyers. The truth is that only one line of demarcation is possible. That line must be drawn with a resolute hand between sanity and insanity: responsibility on the one side; irresponsibility on the other.

A not uncommon argument in favour of the legal interpretation is that "the theoretical superiority of the medical criterion is far outweighed by the practical value of the judicial test. Its error on the score of excessive stringency is in practice corrected by the action of the juries." The fallacy of this reasoning is transparent. It is simply to assert that it is right to hang a madman if a jury will allow it. An argument of this genus was used—and too successfully—by the Attorney-General (Coleridge) who prosecuted the boy O'Connor for an attempted assault upon the Queen. He represented to the jury that it was better for the boy to be sent to prison for a definite term than to an asylum! To prison he was sent; and there his insanity—the evidence in proof of which had been ridiculed at the trial—became manifest, and he had to go to an asylum after all. The gaol did not cure him. It seldom does cure insanity. In this respect it is inferior to the gallows.

Absolute laws seldom endure long without question or mitigation in practice. Hence we see that whilst judges would, by an arbitrary and untenable definition, abrogate the law that insanity carries irresponsibility, juries with minds untrammeled by traditional authority, open to evidence, accept the opinions of experts on this subject; act upon the spirit of the law; restore it to its integrity; and save civilisation from the revolting spectacle of hanging the insane.

There are two principal provisions by which undue harshness or error in the administration of justice in this country are mitigated or corrected. This corrective action is exercised by the juries, or by the Secretary of State for the Home Department. The Home Secretary's action is usually assisted by the representations of the judge or jury, or by some expression of public opinion. In this way a man who is proved to have been innocent of a crime for which he was convicted is, by a subtle process too perplexing to be fathomed by a plain understanding, "graciously pardoned."

If lawyers meeted out to themselves the same law which is applied to doctors and naval commanders, surely they ought, when a prisoner is wrongfully condemned, to be themselves subject to action for damages or to a criminal prosecution. It cannot be doubted that innocent men have been sent to the hulks or hanged through the incompetence of their counsel.

Is there no such thing as malapraxis in law? The jury is, however, the best and most trustworthy security against arbitrary law. Originally instituted as the most effectual safeguard against political oppression, the jury now exercises a scarcely less valuable function in checking the arbitrary tendency of the law. Through the jury is felt the wholesome influence of public opinion. Through the jury the due authority of science is often asserted. It is true that juries may now and then reflect popular prejudices; but they can rarely be accused of servility.

Inexorable Time, not unkind to me or to you, warns me not to open new matter, or I might be tempted to say something about sanitary legislation. We have now a sanitary Parliament. Unfortunately there are not half-a-dozen doctors in the House to inform and to control the overwhelming majority of dilettante dabblers, or illegitimate practitioners, in this branch of medicine. No very great success therefore has yet marked a policy whose intention is worthy of all praise. The most immediate result will at any rate be appreciated by our profession. The doctors are to do nearly all the work, with little moral help, at no small personal risk, for very little substantial pay. So much money is wanted for law, and for defensive and destructive armaments, that we must economise somewhere. As a humble Conservative I venture to hope that our chief will continue to educate his party to the conviction that a successful sanitary policy can only be carried out by a proper appeal to medical science, and a more liberal treatment of medical practitioners.

I must, however, refer to a matter immediately related to my theme: the mode of taking scientific evidence. I think it will not be denied that, howsoever excellent the practice in force may appear to lawyers, it is eminently unsatisfactory to experts. Seldom, probably, does a scientific witness leave the box quite easy in mind as to whether he has spoken "the truth, the whole truth, and nothing but the truth." And not seldom does he experience the mortification of finding what he said utterly wrested from its proper meaning by the perversity of counsel, or misunderstood by the court and jury. The theory that through the conflict of opposing counsel by examination and cross-examination, and the impartial interrogation of the court and jury, the truth is elicited, often signally fails in practice. The questions of counsel are generally prompted by hints gathered from books, or from experts sitting at their elbows. But they are very wary in accepting these suggestions. They may not understand them; and, if they do, they may in their discretion fear that the answer drawn will damage their case. Thus it constantly happens that the expert is only allowed to say so much of the truth as may suit the purpose of counsel; and everyone knows how detached fragments of truth may be made to support a false argument.

A most serious objection to this interrogatory method is that the knowledge and conclusions of the expert can rarely be given in such a way as to challenge the judgment of his profession. Few experts descending from the witness-box would be content to be judged by his fellows upon his evidence as produced in a court of law. It would be in the highest degree unreasonable to hold them responsible for an exposition of their views, which, if they did not repudiate it altogether, they would desire to qualify materially.

The mode of "getting up" evidence is often a curious illustration of "how not to do it." The choice of experts and the nature of the evidence set before the court is in many cases a pure matter of accident. The initiative set by policemen is often held sufficient. It is left to the discretion of the attorneys on either side to select what witnesses they think proper, the choice on the part of the Crown being commonly restricted by parsimonious instructions, and on that of the accused by poverty. In making a selection, the first consideration usually is to get witnesses

whose evidence will fit in with the theory of the prosecution or the defence. Great care is taken to avoid those experts who are apt to speak their convictions unreservedly. These are considered "bad witnesses."

Those who are prepared to admit that the perfection of the practice in our courts is a question open to discussion, may probably see in the practice of foreign courts some points not unworthy of imitation. When an offence against the person is suspected, a judge of instruction appoints one or two experts to make the preliminary investigation; these make a formal report in writing, and this report is a document that has to stand the criticism of their professional brethren. It cannot be suppressed by counsel.

It must often happen that the scientific case as presented to a jury is inaccurate and imperfect, and that further inquiry would clear up all doubt. I am not lawyer enough to know whether the superior criminal courts have the power to do what a coroner or a magistrate sometimes does—that is, to adjourn a trial for the revision of the scientific conclusions; but I do not remember to have heard of such a course being adopted. Such a power of adjourning for further evidence would be the most efficacious check upon the perverse ingenuity of counsel in raising a cloud of doubt by insisting upon some defect or point omitted, and which could often be cleared up by proper reference. But this, the true scientific method, is not that of the law. As the case is presented, so it is dealt with. And here again we sometimes see the jury evade the difficulty by not agreeing to a verdict. A bungling proceeding, rather; for the result is simply a miscarriage of justice.

In France the president of the court may call for fresh scientific evidence, and appoint new experts. Men so chosen are more likely to be free from bias than when they are chosen and paid by one side or the other. The way of taking the opinions of an expert in court is extremely ingenious. He is expected to hear the evidence; but he must not give his opinion upon it, for that would be to usurp the functions of the jury. He must answer upon a "hypothetical case" framed by the counsel upon data more or less accurately representing the facts given in evidence. It is not too much to say that the case so put often bears little resemblance to the true one; and the witness may be harassed by a number of discordant hypotheses. But the clumsiness of the process is best shown by the fact that it constantly breaks down; and judge and counsel are continually lapsing into common sense by putting questions directly bearing upon the case. The general effect of the mode of getting up evidence and of examining experts in courts of justice is to deter many of the best men from appearing as witnesses. This is a most serious injury to the public. It involves a virtual suppression or exclusion of the truth.

But I should exhaust your patience long before I could exhaust the false relations between law and science. The illustrations I have imperfectly drawn will serve the purpose of showing you in some degree the higher public duties which lie before you. As science advances, as education spreads, the legislature and the law will be more and more prepared to welcome your aid and counsel. For this, the diligent prosecution of the scheme of study laid down by the examining boards is the best preparation. No pains have been spared in this school to provide all the appliances and opportunities this scheme demands for its full development. These opportunities you will use to your utmost. And if you want a stimulus to industry beyond the vulgar, but very proper, one of fitting yourselves to succeed in life, and beyond the feeling of duty that animates every honest man, you may find it in the glorious traditions of this hospital, where so many illustrious men have worked, and given the example of work. The light which John Hunter, greatest of biologists; of Thomas Young, second as a natural philosopher only to Newton; of Matthew Baillie, one of those who laid the foundations of modern pathology; of Brodie, for intellectual power second to no surgeon of this century, have shed over the whole profession, and, indeed, over the civilised world, shines with peculiar brightness here at the centre, whence it beamed. We might claim these great men as our scientific ancestors. But such men live for ever. Each has left his soul stamped upon works that will last as long as history shall record the achievements of genius for the delight, the instruction, and the welfare of mankind.

Introductory Lecture
ON
MEDICAL EDUCATION; ITS SPIRIT AND ITS METHOD.

Delivered at King's College, London, Oct. 1st, 1875,

BY JOHN CURNOW, M.D. LOND., M.R.C.P.,
PROFESSOR OF ANATOMY IN AND HON. FELLOW OF KING'S COLLEGE, AND ASSISTANT-PHYSICIAN TO THE HOSPITAL.

MR. PRINCIPAL AND GENTLEMEN,—My colleagues have deputed to me the pleasurable duty of addressing to you those words of encouragement and welcome with which, in accordance with a time-honoured custom, we commence the labours of a new medical year. I could have wished, for your sakes, that this duty had fallen on older shoulders than mine; the more especially when I look back on the addresses, laden with wisdom and information, which I have heard in this theatre from some of the senior members of our staff. But though I shall fail in the inculcation of truths that only mature observation and long experience can teach, I must lay claim to an intense and ardent sympathy with the hopes and fears of every student among my audience, for a vivid reminiscence of my mixed feelings of apprehension, wonder, and expectation, on first taking a seat on those benches, has haunted me ever since I accepted the privilege of welcoming you here in the name of the medical staff of this College. I most cordially and sincerely congratulate the new students on their choice of our profession—a profession whose benefits are now so generally acknowledged, and whose duties are increasing so greatly every day. I can promise to them every assistance and encouragement that is within my power and in the power of every and any member of this staff toward the attainment of such knowledge as is necessary for the practice of their duties with that proficiency which will lighten their after-labours and increase the obligations of a suffering humanity. To the older students such expressions are, I am sure, quite unnecessary, and I shall content myself with the assurance of our continued interest in their work, and the wish that every succeeding anniversary of our opening day may find them as eager, as hopeful, and as determined to add to the amount of fair and honest endeavour, as when they commenced their medical studies. All true work lives for ever; but

> "Work without hope draws nectar in a sieve,
> And hope without an object cannot live."

Before passing on to the main objects of this address, it is incumbent on me to refer to one or two alterations in our teaching staff which have taken place during the past year. By the appointment of Professor Rutherford to the chair of the Institutes of Medicine at the University of Edinburgh, this College sustained a loss which was severely felt, not only by his late colleagues, but by every student who had the great advantage of attending his carefully prepared and graphic demonstrations and lectures. The energy which he infused into his teaching was so evident as to be at once reciprocated by everyone who was brought into contact with him, and greatly increased the difficulty of finding a worthy occupant of the vacant chair. I can, however, congratulate the authorities of this College and our junior students on the happy selection that has been made in the appointment of his successor. Dr. Gerald Yeo has supplemented a brilliant career as a student at Trinity College, Dublin, by some years of special physiological training in the best continental laboratories, and has already secured an excellent reputation both by his original researches and by his success as a teacher in the Carmichael School of Medicine at Dublin. We therefore confidently anticipate that new laurels will be added to the ancient glories of our physiological chair—a chair that has been successively occupied by such distinguished teachers and physiologists as Todd, Bowman, Beale, and Rutherford. I offer our new professor every cordial greeting.

Not only can I congratulate King's College on securing the services of Dr. Gerald Yeo, but I can also congratulate him on being able to begin work at once in a new laboratory, which I believe will, in the completeness of its arrangements and the perfection of its appliances for teaching, vie with any in Great Britain, and with most of those on the continent.

Another link in the chain which binds us to the past history and traditions of King's College has been severed by the resignation of Professor Cartwright, whose genial disposition and courteous manner were so fully appreciated by successive generations of students during the long period of thirty-one years. The appointment of Mr. Hamilton Cartwright to the senior offices will give him a wider field for the energy and talent which he displayed whilst holding the junior post.

The last two or three years have been very eventful in the history of the medical school of this College, and the large infusion of new blood into its teaching staff must make all of us anxious for its future. The recent date of my own appointment and my great attachment to our *alma mater* will be an excuse for my pointing out that the patriotism necessarily implied in so many of your recent vacancies being filled by King's men must be an additional claim on all old King's students, and instil into us a worthy emulation in striving to maintain our ancient prestige.

The first question which confronted me in thinking over the subject-matter for this occasion was the obvious one,—What is the purpose of an introductory lecture? When they were originated they were felt to be necessary in order to explain to the new-comer the objects with which the various subjects in our medical curriculum were introduced, the best mode of obtaining a fair knowledge thereof, and to point out to him what parts of the collateral sciences had a practical bearing on the exercise of our professional avocations. But gradually most lecturers have strayed from this path: many have made use of such addresses to declaim on the peculiar beauty and excellence of that branch of science to which they had devoted their attention; some took occasion to show the great claims of our profession on the public, and urged the advances made therein in a few previous years, or contrasted our medicine with that of bygone ages; whilst others have even been tempted to take prophetic glimpses into the dim vistas of its future. Thus critics have been led to expect, on these occasions, some explanation of our *raison d'être*, or some new guarantees of our onward progress, and their omission from many of the addresses of last year was thus commented on by a leader-writer in *The Times*:—"The lecturers who would instruct the educated portions of the public with regard to the actual position of medicine and surgery among the sciences, with regard to their weaknesses and shortcomings, as well as with regard to their achievements and strength, would render a highly important service." He quite forgets the primary object with which the lectures should have been delivered. I prefer reverting in some measure to the old ideas, and shall address you on the objects of your medical education, and the spirit and methods with which the various subjects embraced therein should be studied, rather than discuss any of the various medical questions in which the lay public are so greatly interested. These are topics for more suitable places, and to be dealt with by the leaders of our profession.

I shall not detain you with a detailed list of the numerous medical studies, for what they are, and in what order they should be attended to, are so explicitly laid down by the various examining bodies, that, however much and in whatever way we may be inclined to differ therefrom, we are powerless to alter them. I take it that most of you are already familiar with their general purposes, and the order in which they must be mastered. To those who are ignorant thereof, the Dean or any of your teachers will give every explanation.

I must first deal very shortly with a few points in the preliminary or general education of the medical student. I regret very much that the standard of the subjects required by some of our examining bodies is still very low, and that the course of education in some even of our higher-class schools is still very deficient, for it throws additional work on the student at the earliest and most difficult part of his career, and prevents the teacher from at once entering on the details of his subject. Thus the demonstrator of anatomy finds himself obliged not only to teach his science, but to point out the elementary laws and facts relative to the life-history and functions of living beings in general, and very frequently to supplement this by the explanation, and occasionally by the orthography, of almost every technical term that he is compelled to use, whether derived from the ancient or the modern languages. This, as has been well put by a colleague of mine (Prof. Baxter), is "as if a professor of Arabic were to begin his course by teaching his class how to spell their mother tongue." It might easily be obviated by requiring such a knowledge of the Greek and Latin classics as would explain our medical terminology; of physics, as would ensure that the student was familiar with the fundamental laws that govern the world of inorganic nature; and of biology, that he should understand the elementary data of that science. By this I do not mean the acquirement of every detail as is insisted on in some of our examinations—the Preliminary Scientific M.B. of the University of London, for example; but on such a course as would call forth and exercise the observation and reasoning powers of the future student. Those of you who start, having had these faculties at all cultivated in the ordinary routine of school life, have obtained an immeasurable advantage at the outset of your medical career. I am glad to see that this plan of study is rapidly supplanting the old one, of knowing some of the practical details of the arts of medicine and surgery through an apprenticeship ofttimes extending over the most important part of one's student life. As one brought up under the old system, and who, before attending a lecture or seeing the interior of a hospital, was fairly conversant with the mystery of bandaging, and could perhaps set an every-day fracture, or, without knowing the why or the wherefore, deftly combine the pharmacopœial armamentarium against each and every case of vomiting or attack of dyspnœa, allow me to assure any of you who deplore your ignorance of such matters that they will come unknown and unforeseen in the after-part of your clinical studies, and when you are far better able to assess them at their proper value. The path of success lies in an early guidance into the proper methods of study, and everything technical comes easily afterwards in due rotation. In insisting on this, I am aware that I am at variance with many excellent authorities and teachers; but I know of no instance in which a student who has devoted his time in early years to a scientific course of study has not mastered all the details of our practical experience with as great facility as he would have done had he occupied the first year or two of his professional education in their acquisition. I therefore congratulate those of you who are commencing your purely medical education with a foundation of scientific knowledge—its aims and its methods. I consider that system by which an acquaintance with the collateral sciences is obtained before the student begins his more strictly medical education one of the most important and useful innovations of late years. In fact, it seems to me that as a knowledge of physics, mechanics, and inorganic chemistry is essential in the early training of an engineer, so an acquaintance with elementary biological phenomena and with their laws is a preliminary necessity for every student of medicine. The more general sciences, then, such as zoology, botany, physics, and inorganic chemistry, should precede the special ones of human anatomy, physiology, and organic chemistry, on which the principles and practice of medicine are based, in order that the medical student may make the best use of the limited time at his command, or otherwise he will either entirely fail to obtain the necessary habits of thought induced by scientific studies, or will only gain them with a vast expenditure of time and trouble. Although, in the case of most of you, this acquaintance with scientific study has not yet commenced, I must as forcibly as possible impress on all its necessity in the formation of the typical physician and surgeon. I earnestly hope that no mere question of the after-utility of so much of this or of that special science will tempt you to limit yourselves to a purely technical education, and so prevent your obtaining the benefits of a liberal scientific culture.

Medicine is advancing daily, and in such advance "the ultimate court of appeal is observation and experiment, and not authority"; and the sooner you educate yourselves to observe closely and carefully, and to draw correct inferences from your observations, the more self-reliant you will

become, the less liable to be turned hither and thither by every new-fangled idea in medical doctrines, and the less servile a follower of some dominant theory or captivating teacher." "L'homme," says Pascal," "est visiblement fait pour penser; c'est toute sa dignité et tout son mérite, et tout son devoir est de penser comme il faut."

Another great advantage of early scientific training is that, at the most impressionable period of life, it brings you face to face with facts and not with mere words only, and teaches you to appreciate the great lesson that "learning and knowledge in science, as in life, are distinct; whereas, in the world of letters, learning and knowledge are one." In medicine you will quickly find that your books and your teachers are guides only; you cannot depend on them exclusively: new problems in disease caused by a never-ceasing change in the circumstances acting on the organism, and by alterations in the organism itself, partly due to those circumstances, and partly, perhaps, to its normal evolution, will speedily necessitate your judging for yourselves. The best teaching that you can have is that which leads you to educate your reasoning powers, instead of stultifying them by artificial tricks of memory or other similar devices which have in the mind a verbal existence only, instead of establishing therein some definite image. This fixation of something almost tangible in distinctness is nearly the only means of acquiring *real* knowledge, and its superiority is exemplified by the well-known advantage of pictorial illustration in teaching the young; and, again, when we consider that, however abstract any word may have become, it originally had a purely concrete meaning, and that the proverbs of all nations—so pithy, of such vast signification, and so easily recalled—consist usually of a natural fact, selected as a picture or parable of a moral truth. "A rolling stone gathers no moss"; "long-lived trees make roots first."

It is your privilege that of late years the lecture system, which formerly was almost exclusively in vogue, is supplemented in every branch of medical science by systematic demonstrations, whilst but a short time ago these were made use of in the teaching of anatomy only. This, however, is no new plan of instruction, but herein we find history reproducing itself. In the earlier days of each science, when learners were few, whatever might have been the paucity of material, the teacher exercised a direct and personal influence over his pupils by demonstrating to them clearly and explicitly the facts on which the ideas that he sought to inculcate were based. But when in the sciences dealing with human life and its conditions prejudices overmastered the teacher, and pupils became more numerous, the lecture system, which was sufficient to spread a knowledge of the abstract and more exact sciences, gradually took the place of, instead of merely guiding, the practical study of the concrete sciences, and we have only recently returned to that method which so clearly attested "the wisdom of the ancients." The well-known pictures of "The Anatomical Lesson," by Rembrandt, and of "Harvey demonstrating his theory of the Circulation of the Blood to Charles I.," by Hannah, show how earnestly the pioneers of our science endeavoured to excite the enthusiasm of their contemporaries by this mode of instruction. And here I would venture to hope that no extraneous difficulties will be thrown in the way of carrying out, under proper and humane regulations, this method of teaching that all-important science, physiology. "Use your eyes as well as your ears" was one of the first axioms instilled into me by our distinguished senior surgeon, and those who interfere with this mode of imparting knowledge will have much to answer for. That penal regulations should be demanded to restrict the advancement of any branch of scientific inquiry is surely to forget the lessons of history, and to ask us to return to the darkness and ignorance of the first fourteen centuries of our era, and which were only overcome when the "giants of those days," Descartes, Galileo, and our own Bacon and Newton, made the first onward step from the time of the early Greek and Roman philosophers, by applying physical methods to the investigation of natural phenomena, and by substituting the inductive mode of reasoning for that purely deductive plan which had alone been used in substantiating the truths of the mathematical sciences. Progress in medicine is, to borrow a phrase from Mill, "a function of two variables"—direct observation and novel experimentation, and is perfected by correct inductive reasoning, which alone can give facility in separating the real points of importance in a given case from those that are adventitious or subsidiary. Indeed, the cultivation of the same faculties and an appreciation of the same methods are requisite even to follow the scientific history of our profession, or to estimate fairly and justly its present position; and, unless we are able to judge of every advancing step from this standpoint, we are merely taking a "leap in the dark" at the bidding of someone perhaps as blind as ourselves.

I shall now pass on to show that the earliest studies to which you will have to pay your attention are eminently qualified to strengthen these faculties, and to render you skilful in their employment. It is hardly necessary for me to remark that it is impossible to practise our profession without doing a vast deal more harm than good, unless we possess a thorough mastery of the technical parts of anatomy. I may, however, insist on the importance of *medical* anatomy technically, as well as those portions which are more necessary for the attainment of *surgical* skill and precision, and which are in general more prominently brought before your notice. Painstaking and accurate dissections can alone give that aptitude in the use of the knife and of the hands which is expected of the surgeon. If these were all the benefits—great though they are—that any of you should derive from the study of anatomy, I should still consider that you would lose the greater portion of its advantages, for it ought to teach you to observe and see things for yourselves, to study relations in size, position, and importance, and to cultivate your powers of memory. To those who have had in their scientific studies a *practical* training in comparative anatomy or in structural botany, this subject will be merely a further step along the same road, and there will be but little difference in the plan by which it is to be mastered; whilst to those who start without such an advantage it will be the first means—as, indeed, it is one of the best—of calling forth your powers of observation.

Physiology and chemistry are of vast importance as educational factors. The latter shows how constant and definite is the relation between cause and effect, and how the slightest modification in the circumstances under which an experiment is performed leads of a necessity to a modification in the conclusions that would be drawn from that experiment. Both of them necessitate the closest observation; they also lead the mind from minute details through a systematic classification up to the widest generalisation, and being eminently progressive, stimulate the inventive faculty, and at the same time discipline and develop the reason. When contrasted, they teach us how simple, definite, and exact are the laws that govern the inorganic world in comparison with the complexity and difficulty of the problems which open before us when we once enter the domain occupied by living organisms. Physiology in its present condition is far removed from the position of an exact science like mathematics, and is therefore of especial significance in making us cautious in our conclusions, in leading us to estimate accurately the value of approximate and probable data, and in teaching us how causes—slight in appearance—persist, grow, and develop, so that the result never becomes final, but quickly surpasses any conception which might be formed from an acquaintance with the laws of dead matter. This is, in fact, one of our most instructive lessons, and one which we are daily called on to correctly estimate and value, even in the routine discharge of our professional duties. It is impossible to overrate the necessity of a technical knowledge of physiology and chemistry to the medical man, and indeed this is rarely lost sight of. Everyone eagerly inquires how much and what parts will it pay me to know, and few are so blind to their own interests as to be ignorant of such portions as they consider necessary from this point of view. The intrinsic and peculiar advantages derived from acquiring proper habits of thought by a careful and honest study of the laws and methods of these sciences are much less frequently taken into consideration. It is impossible to commence our journey in the right path too early. "Character is destiny," says Novalis, or as the idea has been expressed in a recent novel:—"You don't know that you are forming a habit; you take each act to be an individual act which you may perform or not at will; but all the same the succession of them is getting you into its power. Custom gets a grip of your ways of thinking as well as your ways of living; the

habit is formed, and it does not cease its hold until it conducts you to the grave."

In pleading thus earnestly for your early acquisition of the laws and methods of scientific inquiry, I would add one other consideration. Few can pursue such studies without taking an especial interest in, and gaining a great delight for, some branch of science; and this becomes an important source of relaxation and pleasure in the moments that can be and are snatched from even the busiest professional life. They give the brain that change of pursuit and occupation which is requisite to relieve the monotony that enters into our profession, as well as into other avocations. With what keen relish does the educated mind, when overburdened with the cares and anxieties of everyday practical life, turn to the contemplation and investigation of some congenial nook in the wide field of nature, and how intense is the satisfaction of making even one step toward that "untravelled world whose margin fades for ever." Is it not a peculiar boast, and one of the greatest glories of our profession, that so many of its most active members have found time to add to the world's ever accumulating treasures of knowledge, and that so many of the most prominent philosophers and votaries of science in every age have been enrolled in our ranks?

A consideration of the sciences which are concerned with human structure and functions in health leads us to those which are devoted to their study when the body has become the arena of those "ills that flesh is heir to." Morbid anatomy and pathology are the necessary complements of healthy anatomy and physiology; they are to be learnt by the same methods, and the cultivation of the habits of thought requisite for a proper knowledge of the latter will be sufficient to grasp the more advanced subjects. Bonetus in 1700 started morbid anatomy, S'Gräuwen in 1771 pointed out its utility and necessity, and Morgagni instituted a thorough inquiry into its domain, and published his results in 1793, in his "De causis et sedibus Morborum." Since then, this science has been, and is being, assiduously cultivated. I need scarcely impress on you that, however diligently you may attend the dissecting-room in your earlier student-days, you cannot conscientiously consider that you are making the best use of your opportunities unless you carry the same assiduity, earnestness, and close observation into the post-mortem theatre. Morbid anatomy is in general fairly well taught in our schools, but it would be a manifest advantage, and lead to immense results, if every physician and surgeon were to make it a point to carry his teaching in fatal cases from the bedside to the deadhouse, and to point out how far the symptoms observed during life are related to, and dependent on, the appearances disclosed after the death of the patient. Until this be done, the scrupulous care which is taken in the early education of the student will lose much of its benefit; guess-work takes the place of exact information, and his instruction becomes incomplete and unsatisfactory.

Anatomy, whether in health or disease, is a science of observation only, and as the mind will never remain satisfied with merely seeing and recording phenomena, but at once seeks with ardent quest the laws and conditions under which they occur, so we find pathology—the science of diseased functions—arising out of and aiding the inquirer into the facts of morbid anatomy, just as, since the time of Haller, physiology has sprung from and been the handmaid of normal anatomy. Here we are again landed into the region of experimental research and consequent inference, and it is only of late that we have passed the threshold and begun to formulate the laws of this science. Disease has already been displaced from its old position as an entity, entering into and leaving the body almost at will, and we now know that general or local perversions of nutrition, qualitative and quantitative, are sufficient to explain most of its phenomena. The prosecution of this department of knowledge is beset with even more difficulty than that of physiology, but in the last few years such great progress has been made that it is no longer unreasonable to hope that, although it must always wait on advancing physiology, it will soon do so as a very close attendant and companion. I regret that in none of our schools have systematic and independent arrangements for teaching this science been made, but as not long ago in all of them, and even now in some, a single teacher taught both anatomy and physiology, we may confidently anticipate in no very remote future a division of labour among those whose duty it is now to teach not only the facts of diseased structure, but also the causes, consequences, laws, and conditions of those alterations. Until this takes place, medical education will still leave a great desideratum.

And now, gentlemen, I must take leave of the scientific division of our studies—those bases on which the principles of medicine and surgery are founded, and shall refer to the *art* or practice of our profession. We must always remember that curing a patient of any disease or warding it off is a practical art, and not necessarily dependent on any theoretical science. As an engineer builds a bridge by the *art* of engineering, so do we cure an attack of gout by the *art* of therapeutics. As the stability of his work will depend on its being in accordance with the laws of mechanical and physical science, so must we be familiar with the sciences on which our practice is based; but as those laws will not enable him to span a river, or construct a railway, *per se* and without the necessary details of practical experience, so neither can we become proficient practitioners unless we possess an everyday acquaintance with the differences displayed by individuals, even when suffering from the same disease, and with the reactions of our various medicinal agents on different persons, or on the same person at different times and under varying conditions. Such uncertainties must always leave great scope for individual skill and dexterity. Most praiseworthy and excellent attempts are now being made to reduce the effects and actions of our drugs to a scientific system, and one shudders to think what vast harm may be done if this be checked by any legislative interference. It is my duty, however, to warn you that even the most sanguine of us must refer to a far distant date the time when this science of pharmacology, as it is called, and the science of pathology, will rest on such full and necessary data, that we shall be able to grasp, not only all the factors concerned in the production of a diseased state, but have within our power certain and reliable means of combating that condition. Every step in this direction is an unalloyed gain, but the complete fulfilment of such ideas seems to me quite Utopian, though who would pretend to limit the knowable? We must trust the perfection of creation so far as to believe that whatever curiosity the order of things has awakened in our minds the order of things can satisfy. "Tout est permis au philosophe," says Maupertuis, "pourvu qu'il traite tout avec l'esprit philosophique."

As our goal is not to be anatomists, chemists, physiologists, or pathologists only, but to be practical physicians and surgeons, we must be careful to supplement and to diligently carry on our education by the observation of disease and the effect of remedies thereon at the bedside, for here alone can we make ourselves proficient in the great essential of testing our principles by the results of practice.

Here, too, we shall discover the full benefits of that habit of close observation, that capacity for understanding the results of experimental inquiry, and that exercise of judgment, which I have so strongly insisted on as the fruits of perseverance in following and grasping the methods of our antecedent scientific studies. Every case of disease necessitates careful observation, and every dose of medicine which is given constitutes a great and momentous experiment.

The physiological and pathological inquiries by which we have been taught the complexities and contingencies that surround the study of living organisms, particularly of their origin, growth, development, and final degeneration, are now of special value. The exactitude and definiteness of the mathematical and physical sciences cannot be obtained by clinical experiments, and the necessity of an acquaintance with biological laws and methods is at once apparent. Even now I fear that the physico-chemical tendencies of most modern physiologists, by drawing particular attention to those phenomena of the living body which are capable of elucidation by physical means, are leading us to expect definite instead of approximate results, and so may endanger the advantages that a judicious medical training would necessarily derive from the investigation of the subtler problems of life. In all medical and vegetable forms the physiologist is reluctantly obliged to acknowledge that no chemistry, no mechanics, can as yet account for these phenomena.

Clinical medicine and surgery have their scientific and their practical sides, and both must be assiduously culti-

vated. Do not for one moment believe that the one is antagonistic to and subversive of the other; they are mutually complementary, and the only disadvantage is that we are sometimes tempted to strive after an exclusive proficiency in the one, and so by our own neglect entail a failure when we have to deal with the other. The Hindoos write in their sacred books, "Children only, and not the learned, speak of the speculative and the practical faculties as two." Just as the child begins the use of his fingers at the earliest age by moving them idly through mid-air or in endeavouring to grasp the first object within his reach, so you cannot begin the simpler manipulations of every-day practice too soon, and a regular attendance in the out-patient rooms will give you the necessary familiarity with the rudiments of our art, so that when you pass on to the clinical appointments and to your after-duties in the profession, it may not be remarked of you, as I once heard a late surgeon say of one of his dressers: "He has learnt everything; he can do nothing." He alone is learned who reduces his learning to practice, and practical skill without learning degrades our profession to the level of the days of barber-surgery and mediæval medicine. "If knowledge," said Ali the Caliph, "calleth unto practice, well; if not, it goeth away."

The history of our profession has been so often introduced into these addresses that I must ask your forbearance whilst I treat of it in its connexion with this subject. I shall endeavour to show that as medicine is two-sided, so its position has always been due to two factors, one dependent on the condition of science in general and the tendencies of speculative thought at a given period, the other due to tradition merely. On the former element depend its theories and that part of its practice which rests on a scientific basis; from the latter is derived the empirical portion of our art and knowledge. Sufficient attention has scarcely been given to the consideration that the theories and practice of the chief physicians in different ages were a reflex of the prevailing scientific ideas of those ages, and were mainly determined by the habits of thought engendered by the methods of investigation made use of in the cultivation of such sciences as were then most in vogue. A few typical examples will suffice to prove this.

In the first place, when we carefully examine the writings of the illustrious "father of medicine," we find them teeming with careful observations and faithful records—the necessary result of a consistent application to medicine of the scientific method of his immediate predecessors and contemporaries who devoted themselves to geometry, astronomy, and the simpler physics,—sciences of observation and simple relation. Medicine was pursued for a short time on the lines thus laid down; but, soon after the time of Galen, it became involved in the universal obscurity and ignorance, which swamped, not only science, but letters also. The historian of the middle ages thus describes the state of learning at that epoch:—"Law neglected; philosophy perverted till it became contemptible; history nearly silent; poetry rarely and feebly attempted; art more and more vitiated." As a consequence, we find ecclesiasticism occupying the place of medicine, and superstitions of the grossest kind flourishing. The curative agents of older times were displaced by the invariable mediæval resort to prayers, relics of martyrs, and holy water; thus paving the way for that greatest and most monstrous imposture, "the royal touch," which was extensively practised in France, England, and probably Scandinavia for several centuries, and which remains for all time an historical proof of the extreme credulity of even the best informed of the laity in matters affecting their bodily welfare. The materia medica of the Abbess Hildegarde, in the 12th century, contained the herring for curing the itch, the ashes of flies for affections of the skin, &c. As if to illustrate "The Perennials of History," and to demonstrate the persistence and perversity of that mental condition which believes, but does not judge, we find, even in the last century, one eminent divine extolling tar-water as a panacea, and another writing a long book of absurd recipes, in utter ignorance of the claims, position, and methods of medicine as a science. The last-mentioned authority recommends water in which a white onion, steeped in oil, had been boiled, as a means for procuring an easy delivery; three months' living on apples and apple-water, for curing cancer; the application of July wall-flowers, mixed with salt, to the sutures of the head, for the relief of a quartan ague; and water in which quicksilver had been digested for twenty-four hours as an infallible remedy for vomiting. He also gravely relates that a month's cold-bathing and water-drinking cured a Mrs. Bates, of Leicestershire, of a cancer in her breast, a consumption, a sciatica, and rheumatism which she had had for nearly twenty years.* We need not wonder that he attributed his own recovery from a chest affection to "sulphur and supplication," and lost sight of the curative effect of his physician's prescription which he carried out for four months. "If anything does thee good, it must be the country air, with rest, asses' milk, and riding daily."†

The revival of anatomy by Mundinus in 1315 did not at once benefit medicine, for it was then and for the next two centuries largely under the dominion of the twin visionaries, alchemy and astrology.

The desire for longevity and everlasting youth led to the administration of the nobler metals, but without any regard to the disease, the patient, or the power of the remedy. One of these elixirs is of considerable interest as having been recommended by Roger Bacon to Pope Clement the Tenth "to prevent the corruption of any constitution and the infirmities of age for many years." It is a good example of the jargon of these so-called sciences. "For the preparation of this elixir," says the inventor, Petro de Maharncourt, a Picard, "you must take that which is temperate in the fourth degree, that which swims in the sea, that which vegetates in the air, that which is cast out by the sea, that which is found in the bowels of a long-lived animal, a plant of India, and two creeping things which are the food of Tyrians and Egyptians, and let them all be properly prepared." These were interpreted by Roger Bacon to be "gold, pearl, rosemary, spermaceti, the bone found in a stag's heart, lignum aloës, and serpents." But, unfortunately for the reputation of the compound, Clement the Tenth died soon after. In the latter part of the fifteenth and throughout the sixteenth century, the great revival of letters and of science was taking place; individualism asserted itself against authority; intellectual energy displaced stupor; and so we find in the practice of medicine startling innovators, like Paracelsus, Basil Valentine, and Van Helmont, side by side with careful observers, as Fernel, Fracastor, and Linacre.

In 1415 Leonardo Da Vinci proclaimed the fundamental principle that experiment and observation are the only reliable foundations of reasoning in science; that experiment is the only trustworthy interpreter of nature, and is essential to the ascertainment of laws. Galileo and Descartes speedily applied this principle to the investigation of physical phenomena, and Harvey by following the same plan discovered the circulation of the blood. At this time the atmosphere was heavy with ideas derived from physical science, and its conceptions were for the first time introduced into medicine. The chemical physicians were gradually separating themselves from the alchemists, and contesting for superiority against the mathematical sect, and between them the old Galenists—the pure observers—were almost extinguished. In the middle of the seventeenth century, whilst Locke introduced the Baconian method of induction into metaphysics, his friend Sydenham raised English medicine from the lowest empiricism to a science of observation, and again brought into fashion "bedside study," accommodating his theories to his facts, instead of his facts to his theories. The next most noticeable feature in intellectual progress was the tendency to generalise, and to Newton physical science is indebted for the establishment of the great conception of causation which now supplanted those of mere sequence and concurrence. Here, again, we find a similar idea extending itself throughout the medical world. The vital principle or "anima" of Stahl, a necessary and unintelligent agent superintending and directing every part of the economy from its first foundation, assumed great prominence until it was assailed by Hoffmann, who referred such operations to nervous influence. Passing over the eclecticism of Boerhaave and Van Swieten, we find generalisation and induction pursued in the most philosophical spirit by Cullen, and giving rise to a rational empiricism, evidently reflected from the physiological teachings and methods of Haller.

The experimental investigations with which this century

* Primitive Physick, 1747, p. 28 et seq.
† The Journal of the Rev. J. Wesley, vol. ii., p. 263-264.

started were calculated to rouse even the most apathetic, and the philosophers of the next few years (1820–50) set themselves to arrange, classify, and methodise the results of previous inquirers, rather than to strike out into new directions. "Uniformity of the course of nature," and "conservation of force," became the scientific watchwords. Medicine passed through two new phases, the "statistical" and the "expectant." The latter was, in part, due to the influence of the doctrines of Hahnemann on medical practice, and in part to the necessary but involuntary assimilation of the methods of "natural history," now for the first time coming to the front in the rank of sciences, and insisting especially on accurate description and consequent specialisation.

In our own time the greatest philosophic generalisation is undoubtedly due to Lamarck, Darwin, and Spencer, and the immense effects ascribed by us to hereditariness, the law of the transference of neuroses, and some of the modern views of adventitious growths—tubercle and cancer—are all clearly marked by a contact with the "hypothesis of evolution." But even this law is only a particular fact of some wider generalisation presently to disclose itself, and every new step we take in thought only reconciles various seemingly discordant facts, as expressions of a more general law. "Men walk as prophecies of the next age." Thus we see our science following in the same track as science in general, and gradually spreading in ever-widening circles—observation of facts, experimental research, inductive reasoning, simple generalisations, classification, description, and specialisation, and then an endeavour at wider and all-embracing generalisations. Science is a "self-evolving circle, which, from a ring imperceptibly small, rushes on all sides outwards to new and larger circles, and that without end. Our life is an apprenticeship to the truth that around every circle another can be drawn, that there is no end in nature (or in science), but every end is a beginning."

The study of medical science in this juxtaposition with the other sciences will explain most of the vagaries which have marked its progress.

To insist on the traditional side of our professional history will not occupy long. We must not forget that some of its traditions are now engrafted into scientific medicine, and stand on a foundation from which they cannot be displaced—e.g., the employment of diluents in fever, and of bloodletting in some forms of acute dropsy in young and strong persons by Hippocrates, of cold affusion in fever by Currie, &c. Still many remedies whose action we can in no way explain, and whose employment depends on tradition merely, do incalculable benefit, and we dare not deprive ourselves of the advantages of using them because we have not yet been favoured with a satisfactory explanation of their *modus operandi*. I need only recall to your memories such familiar drugs as iodide of potassium, colchicum, mercury, and quinine.

Partly from a daily increasing want of classical training, and partly from the necessity of paying some attention to the huge mass of modern literature, an acquaintance with the works of our predecessors is not so common in our profession as it used to be. I would therefore try to impress on you the vast importance of not neglecting this non-scientific element in our knowledge, and two or three instructive instances will not be out of place.

"Ipecacuanha, as a remedy for dysentery, was introduced into European practice in 1640, and its merits were then pointed out by the Brazilian traveller Maregrav and the physician Piso; only in 1813 was it used in our Indian Medical Service, and it was again neglected. The Madras Medical Board in 1831 recommended it, and once more it was overlooked*; but now every army medical officer is taught to regard it as the most useful remedy—if not the only reliable one—in the treatment of a disease which, from 1842 to 1848 affected 1 in 8 of our troops in the Presidency of Madras, without mentioning its ravages in the rest of India, in China, and in West Africa. Peruvian bark even has been theoretically condemned, and so, according to Morton, "Oliver Cromwell died of an intermittent, because his physicians were too timid to make a trial of the bark, and although at first sold by the Jesuits for its weight of silver, yet about thirty years afterwards several thousand pounds of it lay at Piura and Payta without a purchaser."†

Again, Galen administered the root of the male fern in cases of tapeworm, and although for many centuries his doctrines and opinions held such universal sway over the medical world, that Massaria, a learned Professor of Pavia, as late as the sixteenth century, absolutely declared "that he would sooner err with Galen than be in the right with any other physician"; yet this useful remedy was lost sight of until Louis XV. purchased the knowledge thereof from Madame Nouffleur, a French empiric, who was retailing it as a secret nostrum for the cure of this disease.*

In this traditional element of our professional success every generation starts from a common platform, as far as the older drugs are concerned, and the later ones have a superiority only when new remedies are introduced, such as bromide of potassium or chloral hydrate. The importance of a teacher skilled in the *art* of therapeutics is here most manifest—one who does not slip into the easy groove of a routine practice, but who uses his drugs as Opie mixed his colours, "with brains, Sir." Herein also lies the advantage of a careful study of the works of the great masters of clinical medicine in all ages, from Hippocrates, Boerhaave, and Sydenham, down to Graves, Todd, Stokes, and Trousseau. They added a rational empiricism to careful observation, and allowed no foregone theoretic conclusions to prevent their employing any remedy whose merits had been proved by themselves or by their predecessors. "'Tis opportune to look back on old times and contemplate our forefathers. Great examples grow thin, and to be fetched from the passed world." As for ourselves, we may be sure that the new position of the advancing man has all the powers of the old.

I shall occupy your attention for a few minutes longer, whilst I point out, by way of contrast, the education that was considered necessary for an accomplished physician two centuries ago—such an education as a contemporary of Sydenham's would have had,—in order that we may appreciate at a glance the great care bestowed on it even at that time. We shall see, however, that it was entirely devoted to the cultivation of the observation, and that experimental investigations, morbid anatomy, and reasoning therefrom, were not then dreamt of.

"If now I describe, by way of advice to those that are entering upon the study of this Divine Art, the method of attaining to a point of excellency in it, that may serve our vulgar for a better rule, to distinguish their attainments by the course they have passed through. First, it's most necessarily requisite our young student should be perfectly instructed in the *Latin* and *Greek* tongues, being the universal keys to unlock all those Arts and Sciences, and no less a grace to the future physician. Secondly, being thus qualified for a student, he ought to apply himself close to the study of *Philosophy*, for which *Oxford* and *Cambridge* may justly challenge a præeminence above other Universities. But because according to the first Master, *Hippocrates, Art is long* and *Life is short*, he ought to ingage his Diligence, to absolve his philosophical course in two years at longest, and in the interim for his Recreations and Divertisements enter himself Scholar to the Gardener of the Physick Garden, to be acquainted with the fœtures of Plants; but particularly with those that are familiarly præscribed by Practitioners, to prævent being outwitted by the Herb-women in the markets, and to enable him to give a better answer than it is storied once a Physician did, who having præscribed *Maiden-hair* in his bill, the Apothecary asked him which sort he meant; t'other replyed, some of the locks of a Virgin. Thirdly, supposing our Student to have made a sufficient progress in Philosophy, he may now pass to *Leyden*, and enter himself into a *Collegium Anatomicum*. A proficiency in that part fits him for a *Collegium Medicum Institutionum*, and afterwards for a *Collegium Practicum*, and then it's requisite he should embrace the opportunity of visiting the Sick in the Hospital twice a week with the Physick Professor, where he shall hear him examine those Patients, with all the exactness imaginable, and point at every Disease and its Symptoms as it were with his finger, and afterwards propose several cases upon those distempers, demanding from every Young Student his Opinion, and his grounds and reasons for it; withall requiring of him, what course of Physick ought to be præscribed. I must likewise advise our Student to take his lodgings there at an able Apothecaries' house, to contract the Knowledge of Drugs, and of preparing, dispensing,

* Report on the Progress and Condition of the Royal Gardens at Kew, 1870, p. 5.

† Paris, Pharmacologia, ed. ix.

* Paris, *vide supra*, p. 94.

and mixing them into Compositions. In this course of Study, it would contribute to his future qualification, in sojourning a year with an experienced Manual Operator, without any hindrance to his other affair, and there by an Ocular inspection, and handling of all his Instruments, demanding their names, uses, and manner of using, withall by insinuations to visit his Chyrurgical patients, and see him dress them, and therefore would render his study in Chyrurgery plain and easier. These two years having given occasion to our Student to acquire a system and a brief comprehension of the Theory of Physick, and of the Practice likewise; nothing more remains than to amplifie his commenced Knowledge and Experience by his further Travails, to which end he takes his Journey to *Paris*, to be acquainted with the most famed Physicians, and informed in their way of Practice. The art of preparing Medicines Chymically, having merited a great esteem for its stupendious and admirable effects in the most despair'd Diseases, shews a necessity of being instructed in it, and therefore a Student may for the price of 3 pistols, purchase a most exact Skil in it, of one Mounsieur *Barlet*, if surviving. He must then go to *Montpelier*, and is supposed to merit the title of an able, experienced Physician, and to be raised far above those vulgar ones, that never felt the cold beyond the Chimneys of their homes. Six months at *Padua*, where he may justly aspire to a degree of *Doctor in Physick*, are to be succeeded by 3 months at *Bolongne*, six months at *Rome*, and then he should finally adorn the Intellectuals of the Physician by his Travails through several Countreys homewards. The vulgar will then be able to discern the difference between him and the ordinary Churchyard Physicians, who by their sordid deports and dangerous practice make it their business to ease the blind people of the weight in their pockets, and plunge 'em into worse diseases."*

Finally, gentlemen, if I have shadowed forth too high an ideal for our attainment, my excuse must be the life-long nature of our education, the advantages of order, method, and a proper spirit in its pursuit, and the necessity of a never-ending patience for its consummation, remembering that he who never despairs seldom completely fails. "It is not proper," says Zoroaster, "to understand the intelligible with vehemence, but if you incline your mind you will apprehend it, not too earnestly, but by bringing a pure and inquiring eye." In the words of an ancient sage, you are "benefactors sent by the gods for the salvation of men; inattentive you will become their scourge"; and these words are, if possible, even more applicable now than in his days.

Abstracts
OF THE
INTRODUCTORY LECTURES
DELIVERED AT THE
MEDICAL SCHOOLS OF LONDON
AT THE
Opening of the Session 1875-76.

GUY'S HOSPITAL.

INTRODUCTORY LECTURE BY DR. STEVENSON.

THE lecturer took as his topic the study of medicine. He made reference to the varying esteem in which the profession had been regarded in different ages, and showed that it had not been invariably in periods of the greatest culture and enlightenment that its professors had been most honoured. Taking a hopeful view of the future, he combated the assertion of Dr. Gregory, which has recently been publicly referred to, that medicine will soon cease to be considered a liberal profession; and asserted that on the members of the profession it depends whether medicine shall be regarded as a liberal profession or not. Should gain, greed, and applause be the aims of our profession, the worst anticipations may be expected to be fulfilled; whilst if knowledge of disease, culture, and an honourable professional spirit be dominant the medical profession need not fear adverse criticism.

The qualifications necessary for the study of medicine were next touched upon, and thoroughness of study inculcated—the acquisition of accurate knowledge, and a sound judgment. In the acquisition of these the teacher can but assist, and the requisite opportunities being given it rests with the student to make right use of them.

In the more detailed exposition of his subject, Dr. Stevenson drew a distinction between the preliminary, and more scientific studies which first engage the attention of the student—the basis of medicine and the study of medicine proper (in which term are included medicine and surgery in all their branches).

When natural science first began to make rapid strides, too much was expected to be the immediate and direct result of scientific study; all our old notions were to be overturned and superseded. Such, however, has not been entirely the case; and now the mutual relations of science and medicine are perhaps better understood.

Anatomy, chemistry, and physiology were next considered, and then it was pointed out that these are ancillary to the study of clinical medicine, which, indeed, is to be the central object of the student. The mutual relations of patients and students were also dealt with.

The desirability of making a study of preventive medicine, and the use of statistics in determining the healthiness or unhealthiness of communities received notice, and it was urged that it should no longer be possible to say that medical men, as a rule, care nothing for sanitary science, and even view it with suspicion.

The system of stimulating students by prizes was also defended where not carried to excess; as also the moderate indulgence in manly sports. The lecturer concluded with an exhortation to the students manfully and at all times to do their duty to the profession and to their patients, and not to cease the study of medicine when a qualification to practise it had been obtained, but to make it a lifelong study.

ST. MARY'S HOSPITAL.

DR. RANDALL'S ADDRESS.

DR. RANDALL began by stating that as the advice given to those entering the profession had been wellnigh worn out, and addresses on medical education had been often published, he should venture to begin by touching on a hygienic subject, as a part of State medicine, before dealing with the ethics and mental discipline of student life: not on the air we breathe, the water we drink, nor the food we eat, but upon the productive earth, as health-giving and health-destroying, also as a purifier and preserver or antiseptic; more especially upon these last two qualities, in their sanitary relations to the burial of the dead.

Turning from grave to gay, Dr. Randall then addressed himself to those who were studying their profession, and more especially to those who were commencing. He exhorted them to consider well and reflect upon the exertions which would be required of them, and the amount of labour which was before them. They ought with a determined mind to fix their line of conduct, and to repeat "To be, or not to be; that is the question." Their answer should be a ready and quick one: To be what those who have brought them up and matured them expect them to be; what their teachers desire them to be; what their school for its honour and reputation demands them to be; and what their conscience tells them to be—diligent, hardworking, attentive, and determined students. He reminded them that they had passed the school of their boyhood, and were now entering that of their manhood, and that, the strict discipline of the school of their youth having ceased, they were now comparatively free agents, and their moral and mental discipline, regularity, and orderly conduct rested with themselves. Lecturers and tutors had been appointed to teach them, to assist, guide, advise, and encourage them; provision for studying and becoming acquainted with disease had been made for them. He said the trench had been mapped out and dug; "it is for you to lay the foundation, to

* The accomplisht Physician, the honest Apothecary, and the skilful Chyrurgeon, 1670, pp. 17 et seq.

lay a substantial and lasting one, to fill up this trench and raise it by degrees to a superstructure—a temple of knowledge, which it is true will take a period of four years to build, an apparently long time, therefore the more likely to be well and firmly built, and well furnished."

He pointed out to young beginners the necessity of making a good start with anatomy, histology, and chemistry, and the advantages of thorough knowledge of each subject. He exhorted them in their moments of despondency and anxiety—for the most conscientious students were often the most anxious—to remember that determination and perseverance were more necessary for success that great talent or ability.

After strongly recommending the study of anatomy, which he said required attention, observation, and memory, he reverted to chemistry and natural philosophy. He believed that chemistry had of late years been neglected, and he said: "Chemistry has now become a most important element in your education; pray do not neglect it; without it you cannot study physiology advantageously, nor pathology, nor the principles upon which the treatment of many diseases is based. Under the present system of appointments, many or most of you may become sanitary officers, or have something to do with sanitation. Without you assiduously go through a regular course of the elements and theories of that science you will not comprehend its complications or be able to cope with future difficulties."

He advised the study of the laws of light, heat, and electricity, as this branch of physics had become a powerful factor in the treatment, diagnosis, and prognosis of disease. He illustrated this by different instruments now so much used, including the microscope, and clinical thermometer, which was an instrument as replete with safe diagnosis and prognosis as the stethoscope. Again, electricity and galvanism, which, as therapeutical agents, have made such rapid strides in the last few years, the beneficial effects of which as remedies for the relief of pain, and the restoring of a paralysed limb to use and feeling, or as stimulants, tonics, and sedatives, yes, even to the arresting of hæmorrhage and saving life, are now fully recognised.

"In the study of chemistry and physics the reasoning and calculating faculties will be brought out; you will have scratch and slate work; and thus, combined with those already mentioned in the study of anatomy, a training of the mind will be formed, a necessary training, and as good and efficacious as could be found in the mental training of the best of our educational bodies. Soon you will reach the wards of your hospital, there to learn and diligently watch the symptoms and signs of disease, the action of remedies, and the means adopted to relieve pain and to cure.

"You may rest assured that if you begin well and learn slowly and gradually and effectually, and are well grounded, you will attain your end, and enter life as an honest, efficient, and faithful practitioner. He who sows ought to reap; but if you have been idle and careless and inattentive, you will deeply repent of your conduct; you will have no confidence in yourself, nor be trusted by those who employ you:—

> "'He that trusts you,
> Where he should find you lions finds you hares;
> Where foxes, geese. You are no surer, no!
> Than is the coal of fire upon the ice,
> Or hailstone in the sun.'

You will not have the boldness of the lion—that is, commendable assurance and reliance; nor the cunning of the fox—that is, wisdom, and aptness gained from knowledge; but truly you will be as timid as hares, and feel as foolish as geese; your reputation will be extinguished like the coal of fire upon the ice, or melt away like the hailstones in the sun."

He believed that there was a want of perfection in learning, and reminded them that the secret of being successful and accurate as students, next to perseverance, was the constant habit of reviewing the same subjects daily, weekly, and monthly.

In reviewing, he advised them to try to write what they remembered, "for the habit of writing, by which you attain a facility of describing accurately, is of paramount importance, not only for the sake of learning well, but also with the object of attaining that art for particular occasions, when your knowledge will have to be tested at the different examining boards and for competitive appointments. Remember that if Bacon said that 'reading makes a full man,' he also said that 'writing makes an exact man.'" The lecturer then earnestly recommended them not to enter into sports or games which would interfere with their attendance at lectures or more important instruction in the wards.

After some further remarks upon the line of conduct which the students ought to pursue during their studies, he in conclusion said: "Educate your mind to thoughtful and careful study; the training which you will thus acquire will render you more fit to gain that most important knowledge to be acquired at the bedside, it will tend to make you expert clinical observers and practitioners, the object of all your learning. Do not let this opportunity of acquiring knowledge pass by; do not let this vast field of information run to waste; store and husband it as you would the best riches of your professional life, and be assured it will form the backbone of a successful career in after days. And thus, session after session, if you feel that you have been a real worker, that you have employed your time diligently and assiduously, that you have used the abilities with which God has endowed you to the best advantage, to the satisfaction of your own conscience and to that of your teachers, you will possess such an inward feeling of comfort and of pleasant reflection, that you will be able to exclaim, with the French poet Lamartine:

> "'Le jour s'est écoulé, comme fond dans la bouche
> Un fruit délicieux sous le dent qui le touche,
> Ne laissant après lui que parfum et saveur.
> Oh, mon Dieu! que la terre est pleine de bonheur.'"

ST. THOMAS'S HOSPITAL.

INTRODUCTORY LECTURE BY J. F. PAYNE, M.B.

THE lecturer commenced by stating that he should confine his remarks chiefly to the period of student life. This period involved interests quite sufficiently important to occupy the attention for at least one introductory lecture. The profession of a student ought not to be regarded as simply the commencement of a practical life; it had its own duties and its own dignities. Medical students did not always take an adequate view of their own position, and a little more of the *esprit de corps* which belongs to the students of English and foreign universities might be of considerable service. Indeed, the profession generally was not sufficiently alive to the relations which medical education ought to hold to the higher education of the country. It was unfortunate that local and historical circumstances had placed a gap between the old universities and the profession of medicine, which in other European countries did not exist. This gap could not be at once bridged over, but it was for students to remember that even if they did not form part of an academic body, they might cherish an academic spirit. One of the things that distinguished a true student from a mere craftsman was the endeavour to cultivate his mind. He should propose to himself to become not only well-informed in his profession, but a well-educated man. There were several means to this end—reading, conversation, travel; but, above all, proper use of professional training itself. It was a mistake to make too sharp a contrast between liberal and professional education. Really, the difference depended far less upon what was learnt than on the manner of learning it. Medical studies, properly understood, contained many of the elements of a true liberal education. The value of medical training as a liberal education depended chiefly upon its connexion with the physical sciences. This was an enormous benefit to the medical student, and for the medical profession also it was of great importance to be allied with physical sciences. This would give it in the end the same kind of influence in society as the clerical and legal professions attained after the revival of learning by their possession of clerical scholarship. But medicine was not only allied with medical science. It had itself become embued with the scientific spirit, and was gradually, though not yet completely, brought up to the standard of the physical sciences proper. This scientific spirit, which it was the great merit of modern medicine to have adopted as its guide, was something not easily defined in words, but what it was could be clearly shown by contrasts in tracing the history of any branch of human knowledge. Nowhere was this more clear than in the history of medicine, which, as one of the most ancient of human pursuits, had survived many phases of intellectual

development. Examples were quoted to show how in former times medical science was deficient in true scientific method; and how greatly modern physicians—though yet far from perfection—had improved in this respect. The sciences which medical students have to learn were then spoken of in more detail. It was shown that in anatomy and chemistry the student has types of the two chief divisions of science—the sciences of observation and those of experiment; while physiology, at present in a transitional state, was an example of the immense advantage of adding to pure observation experimental methods. It could not be too continually borne in mind that the subject matters of science consisted of material things, not of names or books. Yet books are quite indispensable in the present state of science to gain a knowledge of things, and their right use requires much discretion. For the beginner the best type of text-book is that which refers the student to the objects, and is useless without them. Fears are sometimes expressed lest the student of the present day should learn too much science, and become, as it is said, too scientific to be practical. But of true science it is impossible to have too much, and it is the most practical kind of knowledge that can be had. Too little science, or science of the wrong kind, is what makes men fail in practice. Equally mistaken is the notion that there is some kind of practical science less rigorous and difficult than genuine knowledge, which may be a chief substitute for it; but nothing of this can be of any use in the long run. Finally a word must be said about examinations. The present system had many evils, but in a practical profession, from which the public demand a guarantee of knowledge and capacity, some system was essential. The important thing for the student to remember was that examinations exist primarily for the benefit of those examined; and it was in a higher sense most important to the candidate himself to know whether he was fit to undertake the responsible duties of a medical practitioner.

DETAILS OF ELECTRICAL EXAMINATION AND TREATMENT IN A CASE OF PERIPHERAL PARALYSIS OF THE FACIAL AND OCULO-MOTOR NERVES.

By THOMAS BUZZARD, M.D., F.R.C.P.,
PHYSICIAN TO THE NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC.

How far the application of electricity is available in paralysis of the external muscles of the eyeball is a point upon which some doubt is still entertained. In the case which is here related, an unusual method of applying voltaism to these muscles was employed with success. Incidentally various points of great interest in reference to diagnosis as well as treatment arose in the course of the patient's illness, and the value of electrical tests was shown no less strikingly than the useful effects of voltaism in bringing back paralysed muscles to the influence of the will.

I was called in December, 1872, into the country by Dr. Playne, of Maidenhead, to see a gentleman sixty-two years of age under the following circumstances:—The patient looked somewhat older than his age, and had been more or less ailing for some years. A year previously he had suffered from some obscure mental symptoms, which had followed prolonged sleeplessness. He was usually dyspeptic, and had experienced pains of rheumatic character. On December 13th he found in the morning that on cleaning his teeth the water ran out of the right side of his mouth, and his face was observed to be drawn over to the left. Next day he could not close his right eye. When I saw him on December 17th, there was pronounced paralysis of the right portio dura. There was complete inability to close the right eye; the angle of the mouth dropped on the right side; in smiling the face was drawn over to the left; and when asked to show his teeth, the lips were scarcely separated on the right side, whilst on the left the teeth were exposed in the usual manner. The aperture of the mouth, under these circumstances, formed an irregular triangle with its base disposed vertically on the left side. The right eye was painful, and watering from exposure. If there was any impairment of sensibility to touch over the right side of the face it was very slight indeed. When the conjunctiva of the right eye was touched with the finger-point, avoiding the margin of the lid, although the pressure was perfectly well felt, there was no reflex closure of the lids.

Here, then, were the ordinary symptoms of a peripheral paralysis of the portio dura, and the fact that the patient had been out in his garden on the evening before his attack rather later than usual, and that the weather was cold and damp, combined towards the probability of his suffering from a rheumatic affection of the nerve, or at least from a condition referable to the influence of cold. The evidence so far appeared to point very strongly to a lesion which was peripheral, and comparatively free, therefore, from cause for anxiety. So, again, although there was some arcus senilis, there was no marked rigidity of the radial or temporal arteries, and no cardiac bruit; but, on the other hand, the patient had complained of some numbness in the left forefinger and thumb and a stinging sensation under one of his toes. (The description of this subjective symptom was vague, and it was impossible to make much of it.) The family history, too, was bad, and it was this which caused Dr. Playne some very natural anxiety when taken in connexion with the patient's symptoms. One brother, it seemed, had died of diabetes, and another had sugar in his urine at that very time. Now, the deep origin of the facial nerve is known to be situated in the floor of the fourth ventricle, and disease or injury of this region, as has been shown by Claude Bernard, is attended with the presence of sugar in the urine. Diabetes is a disease which is apt to show itself in several members of a family. The patient's two brothers were so affected, and he himself was suffering from a paralytic affection of a nerve which takes its rise in that portion of the central nervous system in which lesions are apt to be attended by the presence of sugar in the urine. These circumstances, as may be imagined, tended to throw a doubt upon the diagnosis which would not otherwise have been experienced. On the whole, however, taking into consideration the character of the affection, especially the completeness of the paralysis, my opinion was that the lesion was peripheral in situation. At that time I had not the opportunity, unfortunately, of applying any electric current, and was, therefore, without the most important means of diagnosis. It was agreed that the eye should be covered with a shade, that Dr. Playne should apply faradaism to the affected muscles and let me know the result, and that he should examine the urine for sugar.

On the 25th of January I learnt that there was no improvement in the power of the facial muscles, and that the current was felt much more strongly on the left than on the affected side. I was informed, too, that the urine, although its specific gravity was only from 1010 to 1015, contained traces of sugar when tested by Trommer's process. The general health remained as before; the patient was dyspeptic, and suffered from occasional vomiting. These details appeared to give a more serious complexion to the case, when taken in conjunction with the patient's history, and I felt disposed to doubt the correctness of the opinion I had given. The presence of sugar might point to disease of the medulla oblongata, and the impairment of sensibility of the skin on the right side of the face might signify a spread of the lesion to the sensory root of the fifth nerve.

On the 4th of March the patient came to London on a visit, and I saw him in consultation with Dr. Playne, who then left him in my hands. At that time the paralytic condition was more confirmed than ever; the right cheek was baggy and drooping; the saliva constantly ran out of the right angle of the mouth; the eyelids of the same side by a great effort could nearly be closed one-half, but that was all. In smiling, the face was greatly distorted, the mouth being rapidly carried away to the left; and the patient suffered much annoyance from inability to retain food and saliva in the right side of the mouth. Dr. Playne informed me that he had several times tested the urine for sugar, and had only once, about a month previously, failed to detect any. The test, he said, never indicated any large quantity. The

volume of urine had been usually above the normal, on one occasion amounting to 96 oz.

I had now the desired opportunity of applying electrical tests. I found that neither faradaism nor the interrupted voltaic current would excite the right facial *nerve*. As regards the facial *muscles* of the right side there was no reaction to the strongest faradaic current which could be borne, but when I applied to them the rheophores connected with a Stöhrer's constant battery, using four cells only, and slowly intermitting the current, I obtained marked contraction of those situated about the angle of the mouth. A similar power applied in like manner to the muscles of the sound side of the face produced no reaction. The sensibility of the skin of the face was decidedly lowered on the right side, especially below the eye, both to touch and to the pain of faradaism. The latter fact was peculiarly well marked. The grasp of both hands was weak, but not definitely unequal, and the patient could raise either leg against pressure equally well. There was no marked impairment of sensibility in his hands, but on inquiry he said that there was slight numbness of the finger-points on both sides. There was no diminution in the power of tasting on the right side of the tongue. There was not then, and there had never been, any weakness in the external rectus muscle of the right eye. I examined the urine, which was pale, clear, acid, and of specific gravity 1013. It contained no trace of sugar nor of albumen. There was general derangement of the digestive functions, with a furred tongue and some diarrhœa. The patient was ordered a quarter of a grain of nitrate of silver, with one-fifth of a grain of opium, twice a day, and an effervescing mixture of citrate of potash and soda, with grain doses of iodide of potassium.

As regards the diagnosis, I thought there were sufficient grounds for believing that the lesion lay in some part of the course of the portio dura. Had it been at the deep origin of the nerve, it was unlikely that the sixth nerve, which (according to Lockhart Clarke) arises from the same nucleus as the facial in the floor of the fourth ventricle, would have remained unaffected. Moreover, and this was the most important feature, the electric reaction was distinctly that indicating peripheral paralysis. When the facial nerve is paralysed from central disease, it is, according to my experience, always the case that the facial muscles retain, either entirely or in great part, their power of being excited by faradaism. On the other hand, the absence of excitability by faradaism and the exaggerated influence of interrupted voltaism were completely characteristic of facial paralysis à *frigore*. I advised, and it was agreed, that treatment by interrupted voltaism should be employed.

On the 7th March, then, nearly three months after the seizure, this treatment was commenced, and afterwards continued almost daily for three weeks. Stöhrer's constant current battery was employed, at first four cells being engaged, then six, and finally eight. One rheophore was placed on the cheek at the point where the facial nerve breaks into its two great divisions, and the other at various parts of the face; but especially often near the ala of the nostril. The current thus employed caused vigorous contractions of many muscles affecting the nostril and mouth. At other times one rheophore was applied near the outer canthus, and then the current caused contractions of the orbicularis palpebrarum muscle. Each sitting occupied about twenty minutes. One rheophore was lifted and reapplied at tolerably regular intervals of about 30 or 40 in the minute. During the first week the change effected by this treatment, although at once apparent, was not very marked; but afterwards improvement was noticed daily. On March 28th, when the patient returned into the country, the cheek no longer bagged; the lower lip kept closed, instead of falling and showing, as it had done, the lining membrane, over which saliva trickled; the eye could be very nearly closed. Nor was this improvement altogether the result of a secondary contraction equivalent to that so often seen in the paralysed muscles in a case of hemiplegia, for a very considerable power of moving the mouth by voluntary effort returned. The nerve-twigs to the occipito-frontalis muscle must, I think, have escaped injury. At all events, when I tested the frontal part of this muscle a few days after beginning the treatment described, I found that it responded readily to the faradaic current when one rheophore was placed over the emergence of the portio dura and the other on the muscle. It was also capable of being contracted by voluntary effort.

On June 3rd I saw the patient again, and at that time a casual observer would have noticed but little deformity in his face. But I remarked a slight spasmodic jerking of the muscles of the affected side during facial movements, much as though the muscles, capable of being excited by volition, were not quite under control. At request he could close his eye, leaving only a very narrow aperture between the lids. Asked to show his teeth, the opening of the mouth was still triangular, instead of being more or less quadrilateral. During respiratory movements, little or no difference was perceptible in the action of the alæ nasi. Electrical testing now showed that neither interrupted voltaism nor faradaism produced contractions of the facial muscles.

In September I found that there was still some spasmodic jerking of the affected muscles. But, except when he laughed, it was difficult for an observer to believe that there was any great difference in power between the two sides of the face. Indeed the tendency, in consequence of the occasional jerking I have described, was to cause the idea that it was the left, not the right side of the face which was weakened.

Nearly two years had elapsed when I was again, on May 28th, 1875, summoned to see this patient. I found him in his bedroom, sitting up, with his back to the light, which his left eye was quite unable to tolerate. So much photophobia was there that I had to refrain from turning his face to the window whilst I examined him. The left eye was closed by ptosis of the upper lid, but the patient could, by a strong voluntary effort, open it, though the lid immediately afterwards fell. There was intense pain, referred to the ball of the eye, and also pain, together with tenderness on pressure, upon the left parietal bone, near its junction with the frontal. He had double vision, the images being crossed—that to his right belonging to his left eye. In order to avoid the confusion and giddiness caused by this diplopia, he was wearing a shade over the left eye. I found that there was partial paralysis of the branches of the left oculo-motor nerve, going to the levator palpebræ superioris, the internal, superior, and inferior rectus muscles. It seemed that the patient had been exposed to a great deal of domestic trouble and anxiety, with the result that his appetite and digestion had failed, and a few days before I saw him he had complained of double vision. It appeared also that several decayed teeth, which had been troubling him for some time, had interfered with his power of taking sufficient nourishment. I advised some chloride of ammonium, which seemed to have a good result as far as the pain in the eyeball was concerned. A fortnight later, however, I found that whilst he had ceased to feel pain in the globe of the eye, the paralysis of the muscles before referred to as partial had become complete. There was complete ptosis, and absolute inability to turn the left eye either upwards, downwards, or towards the nose. The symptoms indicating an affection of the left third nerve, which might be accompanied or caused by some effusion in its sheath, I advised a trial of iodide of potassium, although very doubtful whether it would be tolerated. In effect, the first dose so upset the patient's stomach that he could not be induced to try another, and Dr. Playne then prescribed some quinine, ammonia, and gentian. This answered very well; the appetite and general health improved, and when the patient came to town on July 7th, I found him looking much better than he had been. There was still, however, ptosis of the left eyelid. He could, when requested, lift the lid to a certain extent by a manifest effort, but it was immediately dropped. The vision of this eye not being absolutely occluded by the state of the lid, he was forced to cover it with a shade, as otherwise he was so embarrassed by diplopia that he could not walk without staggering. I found the recti muscles greatly wanting in power, but not, I think, quite so incapable as when I had last seen him. However, the eye was turned outwards constantly, and although by a strong voluntary effort it could be carried a very little way towards the nose, and a still less distance upwards and downwards, it was practically fixed in a condition of external strabismus, and was useless for optical purposes.

Guided by my experience of the result of interrupted

voltaism in the facial paralysis of the opposite side of his face more than two years previously, I thought it likely, now that acute symptoms had subsided, that a similar mode of treatment might lead to good results in restoring the action of the muscles of the eyeball which were paralysed. Instructed, too, by former experience, I felt that faradaism was not the treatment proper for the condition. The muscles of the right side of the face had quite failed to respond to faradaism, but they were excited by a very mild voltaic current when it was slowly interrupted. So it seemed likely that a mild and interrupted voltaic current was indicated in the present condition. The best mode of applying this was not so evident. When metal rheophores covered with wetted kid were applied to the closed lids, and a current of varying strength employed, either the electric influence was unfelt or it was painful to the skin. There was difficulty, too, both with these rheophores and also with sponges in applying the stimulus exactly where I wished it. I now bethought me of using the finger as a rheophore, and tried it in the following manner. An assistant having applied to the patient's left temple a sponge rheophore connected with one (it was not material which) pole of a Stöhrer's constant current battery, I grasped in my left hand another sponge rheophore coming from the other pole, and then applied the forefinger of my right hand, covered with a single thickness of muslin wetted with pure water, to the right upper eyelid of the patient. The battery was Weiss's (Foveaux's), which had considerably run down, so that it was perhaps only half-strength. Cautiously increasing the number of cells (it was long before any electric sensation was felt), I found that the current from between 30 and 40 cells could be employed in this manner, my body, through which it was bound to pass, offering a great resistance, and serving indeed as a rheostat. The application was made through the closed lids. The finger proved an exceedingly convenient rheophore. I could apply exactly the amount of pressure desirable, and could reach portions of the globe which it would have been exceedingly difficult to act upon in any other manner. Moreover the strength of the current could be gauged at every instant. That which was employed was just sufficient to cause me to feel a distinct shock in the knuckle of my right forefinger every time the current was interrupted. Occasional flashes of light were observed by the patient, but he felt no pain. We thought we could see a little improvement in power after the first day's application, but there was no doubt of this at all at the close of the second sitting. Not to weary with a daily record, I may say that this treatment was applied on fifteen occasions in all, the applications extending over a period of three weeks. The time occupied at each sitting was from twenty to thirty minutes. A daily increase in power of the muscles was noted; and when the patient returned home, after the last application, he was absolutely well. The lid was entirely under control, and the movements of the left eye were in every respect perfect. Of course, therefore, there was no longer any double vision, and the use of the shade was discarded. The patient has since remained quite well.

Remarks.—I need scarcely say that it is a matter of the gravest import, as regards the prognosis, whether a paralysis of the facial muscles is diagnosed as peripheral or as depending on a lesion of the central nervous system. The importance of this is increased when the patient, as in this case, is a man who has passed the middle period of life; and becomes intensified when, as occurred in the instance which I have described, paralysis of one side of the face is followed by loss of power in certain muscles of the eye on the opposite side. The general conditions, the patient's age, his weak state of health, his family history,—all combine to give a very serious aspect to his case, which even his complete recovery would not of itself suffice to counterbalance. For it is quite conceivable that a man of this age, and with such a history, might suffer from a central nervous lesion, possibly involving small hæmorrhages, which could be repaired, and the paralytic symptoms be *ipso facto* removed, and yet that he might be left in a state peculiarly prone to the repetition of attacks which might at any moment involve districts where the occurrence of lesion would have a serious influence upon life. The mere fact, therefore, of this patient's complete recovery does not of itself bear conclusive testimony to the peripheral character of the affections from which he suffered. The electric reaction, however, of the facial muscles paralysed in the first attack, lends complementary evidence of a kind sufficient, I believe, to enable us to say that not only was that attack certainly dependent upon a lesion of some part of the facial nerve, not of the nervous centre, but that in all probability the second attack was of similar character. Experience, which by this time has been sufficiently universal to make its results positive, teaches us that when there is paralysis of facial muscles, and these a few hours after the attack show a diminution, rapidly going on to an entire abolition of contractility on exposure to induced currents, whilst contractility is effected with abnormal facility by the interrupted voltaic current, the lesion is not a central one, but involves some portion of the portio dura nerve. I have seen no exception to this rule. The lesion may result from cold, from wound of the nerve, or from compression, but it is always a lesion of the nerve, and not of the nervous centre. It was with great confidence, therefore, that when the test applications of the induced and voltaic currents in this case were followed by the results described, I pronounced the facial paralysis to be of peripheral origin. When, in process of time, the second attack occurred, involving on this occasion the oculo-motor nerve of the opposite side, although in the nature of things the application of electrical testing was not practicable, it was not unreasonable to infer that this also depended upon a similar cause to that which had caused facial paralysis two years previously, especially as isolated paralysis of one oculo-motor nerve is almost always peripheral. I ought especially to say that there was good reason to exclude the probability of syphilis in this case, and that there has not been any sign of gout. My prognosis was accordingly favourable, as regards the question of the site of the lesion, although I could not properly give any decided opinion upon the question whether the paralysis would be recovered from or remain permanent. I inclined, however, to the more favourable view, and thought that electrical treatment would be likely to assist recovery.

The voltaic instead of the faradaic current was chosen then, because the paralysis of the eye muscles, like that of the facial muscles, was deemed to be of peripheral character. It seems likely, especially from the researches of Schiff, that induced currents do not determine directly the contraction of muscles, but only act through the medium of the intra-muscular nerves. When these are damaged, as by the influence of cold, the power of causing contraction of the muscles by faradaism ceases. Not so, however, as regards the interrupted voltaic current, the influence of which is now much more marked than it is in healthy striated muscle. Dr. Onimus, of Paris, in some interesting papers which have lately appeared*, expresses the opinion that in cases of paralysis of the facial nerve the muscles, although they do not atrophy, pass into a condition in which the contractile substance resembles rather smooth muscular fibre or protoplasm than normal striated muscle. He reminds us that continuous currents have a much more marked action upon smooth fibres than induced currents, and to provoke the contraction of the unstriated fibres a current of much less intensity is required than for striated muscles. And as with normal smooth fibres so also with those striated fibres which, from an injury to the intra-muscular nerves, have acquired much of the character of smooth muscular fibre. In this mode Dr. Onimus explains the remarkable difference between the action of the induced current and that of voltaism in cases of facial paralysis, as well as the curious fact that the voltaic current acts much more energetically in such cases than in the healthy condition. In the case above related it seems probable that the branches of the portio dura distributed to the muscles, and not the trunk of the nerve itself, were affected. For the occipito-frontalis muscle escaped, and this omission, which is easily explained if the lesion be supposed to be located in a number of nervous twigs, some of which elude the hurtful influence, presents considerable difficulty if we imagine an injury to the trunk itself. Moreover, the sense of taste was preserved on the affected side, which suggests that the lesion was at least beyond the point where the chorda tympani is given off. The impairment of the cutaneous sensibility, which was certainly more marked than I am in the habit of finding it in such cases (there is often a little numbness), is probably to be explained by

* Practitioner, September, 1874, June and August, 1875.

a localised influence upon the branches of the sensory nerve (fifth) similar to that exerted upon those of the portio dura. The exact effect upon the muscles, which was brought about rapidly by the influence of voltaism I do not find it easy to explain. It would seem—and this point is extremely interesting—that if we cut off the influence of the will from striated muscular fibre the structure tends to degrade, and, as regards its function, passes into a state closely resembling that which is characteristic of involuntary muscular fibre. The resemblance is threefold: the fibre is no longer contracted by the influence of the will, it is acted upon by voltaism when faradaism fails to affect it, and the action of voltaism upon it is much more marked than upon healthy striated muscle. Apparently the effect of applying voltaic currents to muscular fibre so degraded is to lead it back to its normal condition. It often happens, as it did in this case, that the will acquires its power to cause contraction of the recovering muscles before they will respond to the influence of the induced current, but after they have ceased to be abnormally excited by voltaism. When this occurs it is probably only a question of time as to when faradaism will be able to exert its ordinary stimulating power once more. When I last tested this gentleman's facial muscles, a few weeks ago, I found that voluntary power over them was restored perhaps to three-quarters of the normal extent, that interrupted voltaism affected the injured in no higher degree than the uninjured side, and that the influence of the induced current had again become manifest, though not quite perfectly. I suppose that voltaism replaced the action of the will, as far as concerned the preservation of the muscular fibres, till such time as the intra-muscular nerves had recovered and allowed the passage of the volitional influence. The circumstance that the face has not entirely recovered is, doubtless, owing to the injury to some of the muscular nerves having been irreparable. There is nothing, it seems to me, in such examples as this, which requires one to fall back upon an electrolytic action of voltaism upon the constituents of the nerve-trunk to account for phenomena which are to be explained more easily in the manner described. I think that the very rapid clearing up of the oculo-motor palsy (in the second attack) under the influence of voltaism goes far to prove that the lesion in this, as in the other paralytic seizure was of a superficial character. The injury at the time electrical treatment was commenced was probably to a great extent repaired, but the muscles which had been cut off for a long time from the stimulating influence of the will had degraded into a state approaching that of involuntary muscular fibre, and were incapable therefore of being acted upon by volition to any effective purpose. The few applications of voltaism restored the muscular fibres to their natural condition, and they became both physically and metaphysically "voluntary."

The use of the hand as a rheophore is not new. It has been employed by many for the application of faradaism, especially to the spinal column. But, as far as I am aware, the use of the finger in the manner described for applying interrupted voltaism to the eye muscles is novel. It is certainly very convenient. What we want in such a case is a large quantity of electricity of low tension, and this is, I think, especially well arrived at by interposing the operator's body in the course of the current, and employing a considerable number of cells.

ON THE NEGLECT OF MINOR SURGICAL OPERATIONS.

BY SAMPSON GAMGEE, F.R.S.E.,
SURGEON TO THE QUEEN'S HOSPITAL, BIRMINGHAM.

THE inclination, natural to many men, to defer matters which are not urgent, and to pride themselves on inaction as evidence of caution, is the cause of a great deal of mental anxiety and physical trouble in all walks of life—in surgery especially. It is open to question whether more mischief is done by men who are always ready for prompt and decisive action, regardless of risk, or by those who never tire of discussing probabilities, and shrink from coming to any decision at all if in doing so their reputation be in any degree imperilled. Certain it is, in the matter of surgical operations, that if a good deal of harm result from their unnecessary performance, much pain and distressing inconvenience might be spared, to say nothing of life prolonged, if some minor surgical operation had been timely performed.

These reflections have been recalled by a study of Sir James Paget's chapter on the Calamities of Surgery, in his recently published Clinical Lectures and Essays. He lays down the rule (p. 68), "Never do an operation if you can cure the patient by any reasonable method or other means." This proposition seems to command obvious assent, independently of the high claims to respect derived from its authorship. But when Sir James proceeds to illustrate his rule, I fear he is supplying the unreasoning opponents of operations with instances and arguments which, under cover of his influence, may be productive of unforeseen results. The fact is that in a very large number of cases in which so-called palliatives are resorted to, an operation is not only the most reasonable method of cure, but the least painful; at once the most creditable to the surgeon, and to the patient the most economical in the broad sense of that term.

When a varicocele is large, oppressing by its dragging weight, and causing, as it sometimes does, atrophy of the testicle, trusses, rings, and all such expedients are of little or no practical use; whereas the radical cure, now that the efficiency and simplicity of the elastic ligature are understood, can be carried out with very little pain, with scarcely any confinement, and with perfect success.

A stricture of the urethra is the only ailment of many men, who are either for years unconscious of its existence, or are the patient objects of palliative measures, in spite of which the stream becomes smaller and more twisted. How easy and effectual is timely dilatation; how little trouble is it for the patient himself to maintain the freedom of the passage by passing at intervals a good-sized elastic bougie. A neglected stricture is the source of infinite trouble to many men, and is one of the most frequent causes of premature decay and death, which timely and well-executed catheterism is practically all-powerful in preventing.

A tendency to hæmorrhoids and their actual existence, doubtless, admits of relief by strict observance of dietetic rules, proper exercise, and ablutions. But when the piles have acquired shape and the solidity of age, the radical cure is the only effectual relief. Take the simple and not unfrequent case of a solitary external pile, sometimes causing little, often much, trouble. Its excision, under the ether spray, is absolutely painless; and if the bleeding spot be touched with a little styptic colloid, the patient may go about his business at once without fear of consequences.

The elongated uvula, which troubles many orators and vocal artists, grows longer and more troublesome in spite of astringent lozenges and gargles. Its removal at just length with a pair of scissors is as nearly painless as can be possibly conceived, and is a lasting source of comfort. But of all conditions in which the superior economy of operative interference over miscalled palliatives is demonstrable, none is so striking as chronic enlargement of the tonsils. Many children with pale faces and depressed chests, who speak thickly and snore in their sleep, have big solid tonsils, which nearly touch in the middle line. It is beautiful to watch, in the course of a very few days, the cheeks becoming rosy and plump, and the chest expanding, after excision of the tonsils with the simple throat-guillotine,* which, in children and adults, is one of the most useful, yet insufficiently practised, operations. Doubtless the great question is when to interfere and when to abstain. That can only be solved by well-balanced judgment based on ample information, neither stimulated by ambition for dexterous display, nor checked by diffidence, which so frequently proclaims itself as the laboured outcome of philosophical caution, when it is in reality the natural offspring of constitutional indecision.

Birmingham.

* Two very striking cyrtometrical observations in point are given by Dr. Norman Moore in St. Bartholomew's Hospital Reports (London, 1874, p. 129).

ON THE

TREATMENT OF SOME CHRONIC UTERINE DISEASES BY MINERAL WATERS AND OTHER REMEDIES.

By THOMAS MORE MADDEN, M.D., M.R.I.A.,

LATELY EXAMINER IN MIDWIFERY AND THE DISEASES OF WOMEN, QUEEN'S UNIVERSITY, IRELAND; PHYSICIAN TO ST. JOSEPH'S HOSPITAL FOR CHILDREN, ETC.

Almost all chronic diseases from which women suffer are now commonly ascribed to the uterus, and supposed to require only uterine treatment. I have elsewhere shown the constitutional nature of many of these complaints. But as this is practically ignored, I again venture to urge the importance of constitutional remedies in such cases, and also propose to describe some mineral waters especially applicable for their cure.

Every age has its prevailing fashions in medicine as certainly as in dress or in manners; and in many instances, after long periods of oblivion, the theories and practices of our predecessors are revived as new discoveries. Thus at present the diseases and displacements of the uterus occupy the most prominent place in the supposed causation of all the diseases of women. For modern gynæcologists, having re-discovered the use of the ancient διωτρα, and disinterred the old aphorism, "*Propter uterum est mulier*," now employ that instrument in all possible cases, and reiterate or expound this text, in accordance with their own views, with all the enthusiasm of recent conversion.

The apparent increase of uterine maladies may in some measure be accounted for by the improved methods of diagnosis now resorted to in such cases. Nor, in considering the causes of the sudden prevalence of the novel complaints which fill the pages of some gynæcological writers, should it be forgotten that the symptoms of diseases formerly as well known and treated under more homely names are frequently re-described in modern pseudo-scientific terms as something new. Some of the polysyllabic words thus employed remind one irresistibly of that "patched and piebald language" of which Hudibras

> "——— had supplies so vast and large.
> For he could coin or counterfit
> New words with little or no wit;
> Words so debased and hard, no stone
> Was hard enough to touch them on:
> And when with hasty noise he spoke 'em
> The ignorant for current took 'em."

Irrespective, however, of their being in vogue and better diagnosed than formerly, uterine diseases must be admitted to be more prevalent. This is chiefly due to the increasing luxury of the age and the more artificial habits and conditions of modern life, producing gout and, indirectly, scrofula—the most common, although generally unrecognised, causes of disease affecting the female reproductive system.

The chronic character of many of the diseases peculiar to women and their proneness to recur after their supposed cure is the result of the general reliance on local remedies, by which their symptoms are mitigated whilst their causes are neglected. Thus congestion or ulceration of the cervix uteri is usually treated only by astringent injections and caustics. In like manner, the various displacements and flexions of the uterus are by many supposed to require nothing beyond the mechanical support of a properly adjusted pessary for their cure. But congestion of the cervix leading to ulceration, and hypertrophy of the fundus uteri occasioning displacements, usually result from chronic inflammation of constitutional origin; and hence caustics and astringents in the former or pessaries in the latter are *per se* mere palliatives, although in appropriate cases both are invaluable and indispensable adjuvants. The vaginal speculum, however necessary in the treatment of many uterine diseases, is far too indiscriminately resorted to in complaints on which its use can throw no light, and in others the cure of which is retarded by its employment. When unnecessary, this must increase any existing irritation of the parts and also keep up that morbid concentration of the patient's mind on the imagined seat of her malady by which a nervous woman can create for herself all the subjective symptoms of any disease. I have had occasion to use the speculum extensively and daily for many years; but I have never thought its employment justifiable as a matter of routine practice, nor, especially in the case of unmarried women, without absolute and well-proved necessity.

The majority of uterine specialists may be considered as followers of one or other of three distinct schools of gynæcology. A few years ago most of the diseases peculiar to women were commonly attributed to inflammation of the cervix uteri; then newer views as to the frequency and pathological importance of ovarian disease in such cases prevailed; and, lastly, the doctrine that these complaints are the result of displacements and flexions of the uterus has come to be adopted as the only sure foundation of uterine therapeutics;

> "For in physic, as in fashion, we find
> The newest has always the run of mankind."

Each of these theories is undoubtedly applicable in many instances, but neither of them holds that exclusive and primary place in the causation of the diseases peculiar to women which some writers insist on.

As far as my own experience allows me to form an opinion, I would say that the most frequent uterine or periuterine cause of impaired health is chronic inflammation of the uterus and its appendages. At the Dispensary for Diseases of Women rather more than one-tenth of the patients under my care suffered from chronic endometritis or cervicitis. In some cases chronic metritis occasions congestion of the cervix; in others it results in hypertrophy of the fundus, eventually causing flexions or displacements; in others, again, it extends to the ovaries, producing menstrual derangements, hysteria, and sterility.

It is surely obvious that a part so intimately connected by structural and sympathetic relations with the other great organs as the uterus cannot possibly suffer any serious interference with its sanitary integrity without affecting the general health. Hence, even if uterine disorders did not originate from constitutional predisposing causes, they must produce constitutional effects and be under the influence of constitutional treatment.

Of the predisposing causes of chronic inflammation of the uterus, by far the most frequent is the scrofulous diathesis. Some years ago I observed, and called attention to the fact, that a large proportion of the patients attending the Dispensary for Diseases of Women were of a well-marked strumous habit of body, or actually suffered from glandular or cutaneous scrofulous affections. In such cases uterine complaints are necessarily impressed with the constitutional taint. Thus, for instance, scrofulous endometritis bears the closest resemblance, in its course, in the peculiar glairy discharge, and other symptoms, to chronic nasal catarrh of scrofulous patients. The granular condition of the uterine mucous membrane is precisely similar to that observed in the conjunctiva in scrofulous phlyctenular ophthalmia. In most cases abrasions and ulcerations of the os and cervix uteri, like other scrofulous sores, are superficial, circular, pale, and indolent, possessing little sensibility, although occasionally irritable; chronic to a degree when either maltreated or neglected, but readily curable when suitable local applications are used conjointly with the constitutional remedies indicated in all scrofulous diseases.

Secondary syphilis is the least common of the constitutional causes of subacute metritis and its effects. In cases of chronic uterine catarrh and abrasion of the os uteri of this kind, the diagnosis is by no means easy; nor is the peculiar vitreous or mottled appearance of the cervix described by some at all pathognomonic of syphilitic cachexia.

Women are supposed to be in a great measure exempt from gout. This opinion, although it may be correct with regard to podagra, is certainly unfounded with regard to anomalous gout, which attacks women quite as much as men; and, in the former, affects the uterus as commonly as regular gout does the joints in the latter. There is no reason why the gouty diathesis should be confined to men. Gouty parents generate female as well as male children: any hereditary disposition must be shared in by both alike, and the exciting causes of the disease are obviously not limited to either sex.

Many of the symptoms which Gooch described under the name of irritable uterus, and which modern gynæcologists have transferred to the account of displacements of that organ, are oftentimes produced by gout, and may occur in-

dependently of any mechanical cause, though they may also coexist with it. I have at present under my care a widow lady, aged about thirty, who had for years been suffering from lumbar and pelvic pain extending down the left thigh, and accompanied with lameness, dysuria, and slight uterine catarrh. The cervix uteri was congested and the os patulous, the sound penetrated five inches, and the fundus was tilted backwards. Before she consulted me she had been treated by others for retroversion by mechanical expedients only, and for a long time I did the same. Every pessary—and the number was almost countless that I tried,—however well it might fit, was practically useless: before a week's time she would limp into my study in as bad a plight as ever. I need not go through the details of the case further than to add that I learned at last that she inherited gout, and, on examining, found her urine laden with uric acid. She was then treated by alkaline remedies and colchicum, sent to Vichy, and has returned with all the symptoms relieved, and, though yet necessitated to wear a Hodge's pessary, is practically free from any discomfort.

With regard to active local treatment in ordinary cases of chronic inflammation and simple ulceration of the os and cervix uteri, Talleyrand's advice to a young diplomatist might be advantageously adopted by gynæcologists—"Surtout point de zèle." If we trusted more to nature in such cases, I verily believe that in most instances our patients would get well sooner than if the local irritation be increased *secundum artem* by almost daily examinations and the repeated application of escharotics. I have, again and again, seen simple abrasions or ulcerations of the cervix uteri cured without any topical treatment whatever; and in other instances cervical ulcerations of long standing were healed, and hypertrophies of the cervix which had resisted the use of the potassa fusa, potassa cum calce, and other violent remedies which had been previously employed by bolder practitioners, were reduced by the use of a strong solution of iodine in glycerine or spirit, or nitrate of silver, combined, of course, with constitutional treatment. In such cases, too, I always rely in great measure on the effects of emollient or medicated tepid vaginal irrigations. For this purpose the ordinary vaginal syringe is always an imperfect and useless, nay, in some cases even a dangerous instrument. I therefore always recommend the use of an irrigator such as that which I exhibited to the Obstetrical Society some time since. The instrument is very portable, can be readily used, and is capable of impelling a gentle continuous stream of plain or medicated water into the vagina for any length of time, and in any position the patient desires, without causing the least fatigue.

Before considering the uses of mineral waters in cases of impaired health connected with chronic inflammation of the uterus and its appendages, we should in the first place recognise the fact that in such cases local treatment, although not to be neglected, should be subordinate to the cure of the constitutional disease which is the remote, and too commonly the undetected, cause of the local complaint. Thus, in cases of scrofulous disease of the cervix uteri, in addition to the obvious hygienic and dietetic means required by all strumous patients, the faulty state of the blood must be corrected by alteratives and tonics—cod-liver oil, small doses of metallic iodine, Blancard's pills, and the syrup of the iodide of iron, and, above all, by the natural chalybeate and iodated mineral waters. In like manner, in instances of uterine irritation occurring in gouty patients our treatment should be primarily directed to the diathetic predisposing cause, and not, as is too generally the case, merely to the predominant local symptoms. It is utterly impossible to cure gouty inflammation of the uterus without constitutional treatment. There is never any difficulty in inducing valetudinarian ladies to take any quantity of medicine, and, as a rule, women bear colchicum and other remedies for gout fully as well as men. But it is by no means so easy to persuade a patient suffering from gouty endometritis, who has long been treated by local measures only, conjoined with a stimulating and nutritious regimen to keep up her strength, that her disease is the result of long indulgence in a diet beyond all proportion to the wants of her system, late hours, and little active open-air exercise. Nor in such cases is the patient always disposed to thank the physician who honestly tells her—

"Si tibi deficiant medici, medici tibi fiant
Hæc tria: mens læta, requies, moderata dieta."

Hysteria in some form is generally associated with chronic uterine disease, and this underlies and complicates most of the symptoms for which gynæcologists are consulted. Counterfeiting every malady, acting through and upon the nervous system, attended with groundless apprehension, depression of spirits, and morbid irritability of temper, oftentimes rendering the patient herself as miserable as she renders those about her, this disease is closely allied to that graver nervous lesion which constitutes insanity, and, if unchecked, may pass into it. Local treatment, except to rectify some displacement or subdue some well-marked ovarian or uterine inflammation, is of little utility in such cases; nor are the tonics and antispasmodics usually relied on comparable, in their therapeutical effects in restoring a hysterical woman to the *mens sana in corpore sano*, to the saline chalybeate water, such as Ems, Schwalbach, or Spa, provided these be used at their source.

"There is," says Burton, "no better physic for a melancholy man than change of air and variety of places." And this physic we prescribe when we order our hysterical patients to any continental watering place. The use of some remote spa is something beyond the effect of the medicated water we have recommended. It necessitates what is of far greater service than any physical remedy in such cases—namely, the moral benefit of change of scene, of occupation, and mode of living. The functions of the liver and bowels, commonly torpid in hysterical women, are stimulated by the change of living, and a sedative effect is generally produced on the hyperæsthetic condition of the patient. The changes and incidents of the journey suggest new thought, by which the patient's mind is diverted from that morbid concentration on her ailment which characterises utero-hysteric disease, and ceasing to dwell on her symptoms, they cease to exist; in other words, she is cured.

The benefits derived from the use of mineral waters in the chronic diseases peculiar to women are by no means limited to the moral effects just referred to. In many of these spas we have medico-chemical agents of extraordinary therapeutic power, and in the next paper I propose to point out the special application of some of these in the constitutional treatment of chronic inflammation of the uterus and its complications.

(To be continued.)

INTRA-CRANIAL ANEURISM.

BY WILLIAM E. HUMBLE, M.D. LOND.

THE rarity of cases of intra-cranial aneurism diagnosed during life induces me to forward an account of a case now under my care. And I do so at the present time, rather than wait for the ultimate issue of the case, in order to draw attention to the importance of practising auscultation of the head more frequently than we are in the habit of doing.

So far as I can find, there are but two cases on record in which intra-cranial aneurism has been diagnosed during life—one by Mr. Coe, of Bristol, in which the carotid artery was tied successfully; and the other by Mr. Jonathan Hutchinson, who related the case at the Clinical Society on the 9th of April, 1875, and in which a spontaneous cure occurred by consolidation of the aneurism, as demonstrated by examination after death from another cause. Mr. Holmes in his lectures on Aneurism refers to Mr. Coe's case, and in the same lecture relates another case of intra-cranial aneurism which was for a long time under observation, but in which auscultation was unfortunately not practised, and the disease not diagnosed during life.

Mr. Holmes says:—"We know nothing at present of the diagnosis of intra-cranial aneurism, so that no treatment can as yet be directed specially to it. And, looking at the very free intercommunication of the four large trunks which nourish the brain, it seems unlikely that surgical measures directed to any one of them would procure the consolidation of an aneurism situated on one of its main branches." I think that a careful consideration of Mr. Coe's and Mr. Hutchinson's cases together with that I am about to relate, and the clearly defined symptoms in each of them, may perhaps lead us to look more favourably upon the possibility of diagnosing this disease within the head.

Mrs. ——, a lady aged forty, has had a family of several

children, the youngest is seven and a half years old. During the last two or three years she has been getting much stouter, having previously been rather thin. Her habits of life have been active and regular. Has been subject for several years to severe attacks of hysteria, so severe as even to threaten the intellectual faculties, and was the subject of one of these attacks about a year and a half ago, since which time she has been quite free from them and her mind tranquil. Her parents are both alive and there does not appear to be any hereditary predisposition beyond gout, to which her father is subject; has not herself suffered from gout or rheumatic fever, or other constitutional affection. Has not received any injury to the head, except that about ten years ago she struck her head rather severely with the bough of a tree.

In March, 1875, she suffered, as did also the children, from an attack of epidemic febricula, and while labouring under it was seized with severe neuralgia of the right brow and adjacent region. The pain was constant, but with severe exacerbations. She also complained of some indistinctness of vision, with slight diplopia, but without perceptible squint. The neuralgia was much relieved by local application of aconite and chloroform, and after a short time disappeared. She never, however, lost the double vision. About the middle of May she told me she was still suffering from the disturbance of sight, and there was also some amount of photophobia, with slight contraction of pupil, especially of the right eye. There was also observed a decided though slight squint inwards of the right eye. Under the use of belladonna collyrium she was much relieved as regarded the photophobia, but the squint continued to increase, and became very decided. The power of the external rectus muscle was not quite lost, and she could by an effort of the will still direct the eye to some extent outwards. She also complained of a constant loud noise in the head. I ventured now to state to the patient that I had reason to fear that a tumour of some kind existed at the base of the brain, and recommended the occasional application of leeches to the temple, blistering behind the ear, &c. This plan was adopted, and she was also put gently under the influence of mercury, keeping the gums just tender for a week or two. The squint continued, although it certainly became less, and on the whole she thought herself better; but the noise in the head continued as loud as ever, and was a serious inconvenience to her, and not at all relieved by the bleeding from the leeches. Her indistinctness of vision also continued, though rather lessened in degree.

About this time she mentioned to me, as a curious circumstance, that her children said they could hear the noise in her head when they placed their heads against hers. On applying the stethoscope to the head I at once heard a rather loud systolic bruit accompanying each pulsation of the heart. The sound was of a blowing character, and was heard loudest over the right temple just above the anterior inferior angle of the parietal bone, thence diminishing in loudness to the vertex, and again louder at the corresponding part of the left side of the head, where it was nearly as loud as on the right side, though to my ear it seemed rather more distant. The sound is heard by the patient loud in the right ear and not in the left. The rapidity and loudness of the murmur are increased both to the patient and the auscultator by exertion or whatever excites the circulation. I was now convinced I had to do with a case of intra-cranial aneurism, probably of the internal carotid artery at the cavernous sinus, which by its pressure on the sixth nerve caused the strabismus, and had caused the neuralgic pains connected with the fifth. The convection of the sound so clearly to the two sides of the head was at once accounted for. I explained the nature of the case generally to my patient, and told her that I was of opinion that the operation of ligature of the carotid should be performed. On the 25th of June I had the pleasure of meeting in consultation Dr. Lush, of Weymouth, who, after a careful examination of the patient, agreed with me in every respect as to the diagnosis and treatment proposed.

My notes at that time state that her health is, except as regards the local symptoms, generally good. She says she has occasional feelings of sickness. Appetite good; bowels regular. There is no valvular murmur heard over the base of the heart, nor any systolic bruit in the neck. A musical venous murmur is heard at the base of the neck, but only produced by a certain amount of pressure with the stethoscope. An attempt was made to stop the noise in the head by pressure on the common carotid, but in consequence of the shortness and stoutness of the patient's neck it was not found possible with any moderate amount of pressure to compress the artery sufficiently effectually to stop the pulsations or the aneurismal sound in the head. She sleeps well, and in fact is more inclined to sleep than usual, at times almost falling asleep in the daytime. The special senses are not affected, except vision slightly. There is no paralysis of either of the extremities, though she has been subject to occasional numbness of the fingers. Catamenia regular.

Ligation of the carotid has been declined by the patient, at least for the present. Mr. Tufnell's plan, by absolute recumbency and restricted diet, was then urged strongly, but with no better success, so far as concerned a fair and full trial of the plan; and I then determined on adopting the means so strongly advocated by Dr. Balfour for thoracic aneurisms. That plan is now being carried out, and I propose at a future time supplementing this communication by another recording the treatment and its results, with such further information as may be obtained in the progress of the case.

Corfe Castle, Dorset.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

LONDON HOSPITAL.

CASES OF FISTULA IN ANO.

(Under the care of Mr. MAUNDER.)

WE are indebted to Mr. J. Job, house-surgeon, for this report of some severe cases of fistula in ano.

CASE 1.—M. A. W——, about twenty-four years of age, a married woman in fair health, was found, on examination, to be affected with a fistula in ano on both sides of the anus. Mr. Maunder treated one fistula in the usual way by incision with the knife, and to the other he applied the elastic ligature. The operations were performed on March 10th, 1875. On the twenty-third day after the operation the knife wound was found to be healed; but not until the sixty-first day subsequent to operation was the ligature wound cicatrised. During the first few days a good deal of pain was felt at the seat of ligature, which came away, as it is shown in the drawing, on the tenth day. The little rounded head with a depression in the centre originally enclosed the tissues to be divided.

CASE 2.—J. H——, aged thirty-three, admitted May 3rd, 1875, with a fistula on the right side of the anus. On examination it was found to be about five inches in length, but with an intervening opening just within the sphincter. The most accessible portion of the fistula was laid open with a bistoury, while the rest of it was cut up with a pair of common scissors, the pointed blade of which traversed the canal, guided by a director, the bowel being protected from the second blade, and the progress of the operation ascertained by the left forefinger introduced into the rectum.

During the progress of the case a small abscess formed in the buttock, towards the perineum, which required evacuation. Notwithstanding this complication, and the great length of the sinus, the patient made a good recovery, and has remained well.

CASE 3.—E. M——, sixty-five years of age, admitted May 21st, 1875, was also the subject of a fistulous opening on the right side of the anus. On examination, a very long fistula was found, passing to the left of the vagina, and apparently terminating behind and on the left side of the symphysis pubis. No bare bone could be detected. An intervening opening into the rectum just within the sphincter existed.

Mr. Maunder declined to lay open so extensive a fistula, and explained to the patient that he could not undertake to cure her absolutely, but might be able by operation to prevent the constant discharge at the external orifice of the fistula, which was in itself a great source of annoyance and

discomfort. He proposed to lay open that portion of the sinus which existed between the external orifice and the opening just within the sphincter; leaving the rest of the sinus to empty its secretion into the bowel, to be discharged at stool.

The desired object was attained by the operation.

SOUTH LONDON OPHTHALMIC HOSPITAL.

EMBOLISM OF BRANCHES OF THE ARTERIA CENTRALIS RETINÆ WITHIN THE EYE; WITH REMARKS.

(Under the care of Mr. EDWARD NETTLESHIP.)

SEVERAL cases of embolism of one or more intraocular branches of the central artery of the retina have been recorded (Sämisch, Hirschmann, Barkar, and Knapp, and others). They are still, however, among the uncommon cases in ophthalmic literature, and additional instances still have interest enough to justify a record, while the case given below admits of useful comparison in several points with those already published, notwithstanding Knapp's able *résumé* of the subject.*

Bessie T——, a very intelligent girl of sixteen, whilst dressing one morning about June, 1874, suddenly found that her sight was becoming defective. On trying each eye separately she found that when she covered the right the left was "quite blind"—i.e., she was "in total darkness." In a short time the sight began to return, and before long, she thinks within twenty-four hours of the failure, she could see as well as when Mr. Nettleship first saw her six weeks later. She described the sight as returning first in the middle of the visual field; a small point of light "like a pea," which gradually enlarged. She came to the hospital on August 5th, 1874, complaining of defect of the left eye, when Mr. Nettleship found that she could see nothing in the outer, upper, and upper-inner parts of the visual field; but that sight was good elsewhere, and direct vision perfect, so that she read No. 1 Jaeger and 20 Snellen at 20 ft. The sight and visual field of the other eye were perfect.

Ophthalmoscopic examination of the defective eye disclosed a slight milky haziness of the (real) lower part of the retina, the upper boundary of which on the yellow-spot side of the disc formed an abrupt horizontal line running outwards from the lower edge of the disc below the yellow spot itself, which was thus intact; on the nasal side of the disc no such abrupt distinction between healthy and diseased parts was discernible. The disc was considerably paler than that of the other eye, and the retinal arteries, especially the (real) lower branches, were considerably diminished in size. There were two small round spots of black pigment in the lower part of the fundus at some distance from the optic disc.

The true nature of the case did not occur to Mr. Nettleship until he had examined the case several times, and it was treated for some months as an obscure retino-choroiditis, there being nothing in the girl's appearance or family history to suggest any probable explanation.

Three months later (Oct. 31st) she considered that the field of vision had enlarged somewhat, but, on measurement, this was very doubtful. There was still slight milkiness of the retina, and the other appearances were the same as at the first examination. On July 6th, 1875, about thirteen months after the failure of sight, the visual field, taken at a foot from the patient's eye, measured only an inch upwards, and three or four inches to the temporal side of the centre, while below and to the nasal side it was of full size. She had no perception of objects whatever in the defective parts of the field, but suddenly saw them quite distinctly as soon as they came within the above limits. Ophthalmoscopic examination (both of the erect and inverted image) showed the same marked pallor of the optic disc as before, while on careful inspection of the vessels it was found that the (real) lower divisions of the artery (two or three in number) were so extremely diminished that they could not be traced beyond the lower border of the disc; some hazy, thin, white lines in the lower part of the retina near the disc were probably the obliterated remains of these arteries, but with an undilated pupil this point could not be determined with certainty. The small arterial branches running straight outwards to the yellow-spot region were unaltered. The retinal veins were rather small. The effect of pressure on the eyeball as a test of the circulation in the arteries was unfortunately omitted.

A doubtful systolic bruit was heard over the base of the heart. She had never had rheumatic fever, but her father was subject to "chalk-gout." She now stated that for some little time before the sudden failure of sight she used to have "momentary" attacks of a curious feeling, during which the objects she was looking at seemed to "rise up"; it was not "double vision," and was not "giddiness," although she said she would have fallen during the attacks had she not held on to a support.

The ophthalmoscopic appearances, taken with the history of the case and the ascertained character and position of the visual defect, leave no room for doubt, in Mr. Nettleship's opinion, that this was a case of embolic obstruction of the lower and inner divisions of the arteria centralis retinæ, the upper divisions and the small branches to the yellow-spot region remaining pervious. The two spots of pigment in the fundus were doubtless the remains of hæmorrhages.

Mr. Nettleship remarks that in several cases of embolism of branches of the arteria centralis the first symptom has been obscuration of the whole visual field, amounting either to total blindness or general haze. In his case the girl said she was in total darkness with the affected eye for about an hour, after which the sight quickly and completely returned in the unaffected part of the field. In one of Knapp's cases recovery was also very complete and rapid in the unaffected part, while in two others the improvement was spread over several weeks, and the parts supplied by still pervious branches never perfectly recovered. It appears, as Knapp has pointed out, that the part of the retina supplied by the blocked branch or branches never recovers in the least; in each of the seven cases, as in his own, the corresponding part of the visual field was entirely wanting, the boundaries of the defective portion being as a rule sharply defined. The yellow-spot region, as in Mr. Nettleship's case, generally escapes and recovers perfectly from the temporary general blindness. If, however, the general obscuration lasts for long, the yellow spot does not recover perfectly, and central vision is not fully restored. The small arterial twigs which commonly pass outwards directly from the main artery on the disc, to supply the yellow spot, are seldom blocked in the cases under consideration, and it is doubtless in part to this fact that we must attribute the frequent retention of good or even perfect central vision. There are in these cases, as in instances of embolism of the trunk of the arteria centralis, great differences in the ophthalmoscopic changes of the retina, especially in respect to the duration of the retinal haze and the presence or absence of hæmorrhages. Mr. Nettleship thinks that perhaps the chief factor in determining the occurrence of hæmorrhage will be the soundness or otherwise of the retinal capillaries and veins. Something may also be due to the part of the retina involved; thus there would be more probability of passive collateral distension and rupture in the yellow-spot region, where he states that the blood-supply is very free and capillary anastomoses between arterial twigs are found, than in other parts less freely supplied with vessels. Possibly an unusually free communication between the ciliary and retinal arteries near the disc may, as supposed by Knapp, now and then act in the same way. The condition of the *optic disc* is a feature in these cases to which Mr. Nettleship calls attention. In no less than four of seven recorded cases it is particularly noted that the part of the disc which corresponded to the blocked arterial branch was very pale and atrophic, the remainder being either quite healthy or much less pale; while in one of the remaining cases the same is implied, though not quite clearly stated. In his case no difference was noticed between the different parts of the disc, and though a slight variation may have escaped observation, it is unlikely that there was any marked distinction of colour in the parts corresponding to the embolic and pervious arteries respectively. In this connexion Mr. Nettleship observes that in his case all the arteries were at first somewhat diminished, and the whole disc pale, the pervious arteries afterwards regaining about their normal size; the same is noted in one of Knapp's cases, where the pervious arteries were a little smaller than the correspond-

* Archives of Ophth. and Otol., vol. iii., No. 1, p. 36, 1873.

ing branches in the other eye, while the corresponding part of the disc, though less pale than the part belonging to the embolic branches, was still decidedly paler than the disc of the other eye. Mr. Nettleship thinks that the pallor of the disc in cases of embolism must probably be ascribed—first, to an inflammation of the disc, accompanied by the formation of opaque tissue, which may or may not, according to its quantity, interfere with the function of the nerve-fibres passing through it; secondly, to atrophy of the nerve-fibres of the disc, consecutive to atrophy of the retina, the latter being the result of the permanent cessation of blood-supply. If the embolism occludes the trunk of the central artery the whole area of the retina will atrophy, and the consecutive atrophy will include the whole disc; if the embolus shuts off the blood from only a part of the retina, this part alone will atrophy, and the secondary atrophy of the disc will involve only the corresponding portion. That chronic inflammatory changes do occur has been shown by the results of several post-mortem examinations of the optic nerve and disc in cases of embolism, the alterations having been noted especially in the ocular end of the nerve-sheath, and about the lamina cribrosa. That retention of perfect sight by the unaffected part of the retina is compatible with a very definite degree of pallor of the entire disc, also seems to point to the pallor being, in such a case, due to morbid opacity (inflammatory) of the substance of the optic disc, obscuring its capillaries, rather than to atrophy and anæmia. Mr. Nettleship suggests that in embolism of a branch of the central artery, the inflammatory changes may involve either the corresponding part only or the whole of the disc; but the atrophy of nerve-fibres, and consequent intense and punctate whiteness mentioned in some cases, will occur only on the part corresponding to the affected portion of the retina.

Mr. Nettleship thus accounts for retention of perfect sight by the unaffected portion of retina, together with pallor of the entire disc, in these cases, by attributing the pallor to newly-formed white tissue, which does not of necessity interfere with the nerve-fibres.

The question may be asked whether in some other cases where good sight co-exists with pale or partly pale discs, the same explanation will suffice? In tobacco amaurosis, for instance, where the patient has recovered almost completely, it is, Mr. Nettleship believes, usual to find the discs in very much the same state as during the amblyopia—viz., exhibiting a varying amount of pallor on the yellow-spot side, the remainder being, as a rule, of healthy colour. He thinks it probable, from the fact that in this malady the failure of sight often precedes by many weeks the appearance of any atrophic change, that the amblyopia is caused by some change occurring primarily in the nerve-fibres themselves, and which impairs their function before causing visible alteration in their structure; rather than by any inflammatory process in the surrounding connective tissue acting secondarily on the nerve-fibres, as in cases of embolism.

CASHEL UNION HOSPITAL.

EMPYEMA; THORACENTESIS.

(Under the care of Mr. THOMAS LAFFAN.)

THE following notes were taken by Mr. O'Dwyer.

J. P——, aged thirty-five, shoemaker, was admitted into hospital on March 21st, 1874. There was a previous history of chronic bronchitis of long standing; his habits also had been intemperate. Pulse 112; respiration 48; temperature 100°. Chest measurements: 18¼ in., right; 19¼ in., left side.

On admission there were, in addition to the signs of universal bronchitis, signs of effusion occupying the entire of the left half of the chest, as well as of partial effusion in the base of the right pleura. The general condition of the patient was so grave that it was deemed necessary to perform thoracentesis. This was accordingly done on March 24th. The incision was made between the seventh and eighth ribs, and 56 oz. of pus were evacuated by the aspirator. The wound was enlarged, and directions were given to keep it permanently open, but this the unmanageableness of the patient rendered impracticable. The patient seemed much benefited; pulse, respiration, &c., were much improved. On the 27th a bronchial fistula formed, as evidenced by the sudden expectoration of a large quantity of pus and by auscultatory sounds peculiar to that condition. The patient continued in the same improved condition for six or eight weeks. He daily expectorated some pus, and a drain continued also to flow through the small external opening. A tardy consent was wrung from him towards the end of April to have a free opening and counter-opening made. This attempt was defeated by the existence of strong adhesions at the points where the trocar was inserted. Permission to repeat the attempt was sought, but this the patient would not give. He left the hospital on May 3rd, and returned no better on July 3rd. From this time until September his state remained the same. He continued daily to expectorate some pus, but the bulk of what was secreted remained pent up and decomposing in the pleural sac, it being quite clear that the patient was less borne down by hectic than slowly poisoned by the gradual absorption of the decomposing pus.

Repeated efforts were made to obtain his consent to allow free openings to be made in situations where the light of previous experience indicated that they might be made successfully. All these efforts proved in vain; and towards the end of September it became more and more evident that this chronic purulent absorption could have but the one ending. The man remained in the hospital till the end of October. His appetite and strength failed; he became emaciated; his stomach and bowels were both disordered; the local signs and symptoms continued as before; the expectoration was, however, materially lessened; and the pulse and respiration fell nearly to the normal standard. He left the hospital on the 17th October, and died on the 15th November following.

This case seems to teach the necessity for the thorough and continuous drainage of an empyemic cavity. It is also another of those cases which prove at once the safety with which thoracentesis may be performed and the at least temporary gain which it yields. Had the operation not been performed, this man would, in all human probability, have died shortly after his admission. It also shows how imperfect an outlet a bronchial fistula is for purulent secretions.

Reviews and Notices of Books.

Essays and Papers on some Fallacies of Statistics. By HENRY W. RUMSEY, M.D., F.R.S. London: Smith, Elder, and Co.

DURING the past twenty years the name of the author of these essays has been intimately associated with all branches of sanitary reform, and some of his efforts to render State hygiene more of a reality than it has been, or is even yet, will be found in the pages of this volume. A perusal of these essays, some of which were written more than fifteen years ago, is still full of interest from the fact, discouraging as it may appear to an ardent disciple of sanitary reform, that by far the larger proportion of what was then advocated by Dr. Rumsey and others as necessary to sanitary progress still remains unaccomplished. State registration of sickness still exists only in the regions of speculation, discussion, and anticipation. Certification of the causes of death, although somewhat modified and improved by the recent Births and Deaths Registration Act, 1874, is still far from complete, as no provision is yet made for obtaining any trustworthy return as to the cause of death in those cases in which no medical practitioner has been in attendance and no inquest been held. Again, although recent legislation has placed some restriction upon the burial of still-born children, with a view to check the dangerous practice which previously prevailed of getting deceased children interred as still-born, England yet stands almost alone, among nations in which vital statistics are recorded, in the non-registration of still-births.

Notwithstanding these and many other shortcomings, which are ably discussed by Dr. Rumsey in these essays, it

would answer no useful purpose to ignore the real progress that has been made in the last few years in the sanitary organisation of the country, which, if it has not taken the form which Dr. Rumsey advocated, has marked the commencement of a new sanitary era. No part of the country is now without its urban or rural sanitary authority, upon which distinctly rests the responsibility of its sanitary condition; and, with few exceptions, each of these authorities has appointed a medical officer of health. Then in the Medical Department of the Local Government Board we have now the hopeful nucleus of a State board of health or Central health authority. The working of the new system has disclosed plenty of defects, and especially the far too permissive character of so large a proportion of recent sanitary enactments; but when combined sanitary districts with efficient and experienced medical officers of health, who are well paid and debarred from private practice, are the rule and not the exception, and the Central authority is invested with an actual power of control, then will sanitary progress become more general, and begin to exercise a more rapid effect upon the public health. The most fatal defect of the present system is that in small towns and in rural districts the sanitary authorities consist in great part of those whose private interests clash with the performance of their sanitary duties. Combined sanitary authorities, in order as far as possible to neutralise these interests, are fully as important in the interest of sanitary progress as combined districts, in order to secure the services of efficient and independent medical officers of health.

But to return to Dr. Rumsey's essays, their subject and scope may be considered from two points of view. First, in their bearing upon the past, present, and future of sanitary organisation and progress, and upon the defects and means for improvement of the various sources of our information as to national vital statistics; and secondly, as to the value of the argument which runs through most of them, depreciatory of what has been styled the *national* system of death-rates, as a test of sanitary condition.

From the first point of view we recommend these essays to the perusal of all sanitarians, as a contribution to the history of sanitary aspirations during the past twenty years, some of which have borne fruit, although not always of the recommended shape, while many of them, as we have noted, still remain mere aspirations. Dr. Rumsey's proposed sanitary organisation, under medical and sanitary superintendent registrars, has, it is true, not come to pass, but most of its objects will be attained under the existing system of sanitary districts, authorities, and medical officers of health, more especially if upon these officers were placed the responsibility of certifying the causes of those deaths in which this information is not attainable either from medical practitioner or coroner. With regard to the defects and shortcomings of our census enumerations, and our birth and death registers, for the purposes of sanitary statistics, it cannot but be useful that they should be generally recognised and understood; at the same time it is desirable that they should not be exaggerated, or their effect overrated. This brings us to the consideration of the second aspect of the volume before us.

The essays and papers here reprinted under the title of "Some Fallacies of Statistics," contain the groundwork and substance of the sweeping charges against the value of death-rates, as published by the Registrar-General, made by Dr. Letheby in his inaugural address in the last session of the Health Officers' Society, an address which was as remarkable for its uncompromising denunciation of the "national" system of mortality statistics as for the fallacious argument by which it was sought to support those charges. Throughout these essays the disturbing influence, among others, of sex and age distribution, is continually dwelt upon, without any attempt being made to ascertain the limit of error that could be thus produced on any existing population. Like many reformers in other fields, Dr. Rumsey has, moreover, been often too intent on pointing out undoubted defects in our sources of information, to appraise at its proper value what has been effected with the aid of this information, or to ascertain what is the actual extent of error which is due to those defects and shortcomings. Hence his conclusions that "the comparison of temporary death-rates for practical objects is a mischievous absurdity"; and that "the indiscriminate appeals so often made to the rates of mortality threaten to become a public nuisance." Such opinions are based on a belief that it is possible for a community in a good sanitary condition to show a high death-rate, and, on the other hand, for a population in an unsatisfactory sanitary condition to show a low death-rate. There is no serious attempt to justify this belief. Although Dr. Rumsey, in a note to one of these essays, states that he does not "attack rates of mortality in the abstract, but only the abuse of them," no impartial reader of the present volume can come to any other conclusion than that he entirely distrusts the "national" system of death-rates. He expresses a belief that under this system a high death-rate may be shown when the correct rate of mortality is really a low one, and that these death-rates are "not only a statistical fiction, but lead to practical mistakes."

Since these papers were originally written and published, the limit of error produced by sex and age distribution in a population has been carefully calculated and proved to be confined within such narrow limits as not seriously to affect the general usefulness of death-rates calculated by the "national" system. The "fallacy" of the birth-rate being the controlling element of the death-rate has been once more exposed, and the oft-urged theory that a high birth-rate produces and explains a high death-rate has again and again been shown to be false; it has also been conclusively proved that, sanitary conditions being equal, the death-rate in populations with high birth-rates should be lower than in those with low birth-rates, because the effect of a large proportion of infants and young children in a population, upon its death-rate, is more than counterbalanced by the inevitably large proportion of young adults, and the small proportion of elderly persons, among whom the death-rate is even higher than among young children. Death-rates, as published by the Registrar-General, in calling into prominent notice the great waste of life in towns, have rather understated the excess of urban mortality, compared with that in rural districts, but all general deductions from them have been fully warranted. The effect of sex distribution in different populations on the death-rate is almost inappreciable, and the individual or aggregate influence of other disturbing causes is insufficient to warrant the surrender of the use of death-rates for general conclusions as to sanitary conditions, more especially as no better test is even proposed. The registration of disease, necessary as it is, and valuable as it will be, will never afford a test of general sanitary condition, as it can only apply to a varying portion of a population.

Although some of Dr. Rumsey's "fallacies" are of his own conjuring and are more or less unsound, and the effect of others is exaggerated, we should advise students of vital statistics, who are now numerous, to read these essays. They are suggestive, even when they are not altogether trustworthy, and after the perusal of what has been written on the other side of the question, the student will be in a position to arrive at independent conclusions on the subject.

Space alone forbids our consideration of many of the interesting and important branches of sanitation which are discussed in these essays, and we can only regret that their influence for good is somewhat affected by the following paradoxical and, as we believe, untenable assertions. Dr. Rumsey says, "a diminution in the rate of mortality will be found to coexist generally with an augmentation of the rate of sickness. The very triumphs of advancing medical art are probably attended by an average prolongation of the helpless and infirm conditions of life." In another place, speaking of the increased duration of life in our great cities as the result of improved sanitary conditions and medical treatment, he adds: "But, at the same time, the sickly and infirm period of existence has been prolonged probably in a greater degree than life itself. Weakly, diseased children are now mercifully helped, as they never were in olden times, to grow up into weakly, ailing adults, who, in their turn, propagate with abnormal fecundity an unsound progeny." Such arguments, if logically worked out, would lead to pure fatalism, and seem out of place when urged by so consistent and ardent a sanitary reformer as Dr. Rumsey. They are, moreover, dangerous weapons to put in the hands of the enemies of sanitary progress, although they might recommend themselves to the Peculiar People.

In conclusion, we may express a hope that Dr. Rumsey's health may ere long allow him again to take an active part in the now more hopeful progress towards a system of public hygiene worthy of being called national.

Outlines of Practical Histology. By WILLIAM RUTHERFORD, M.D., F.R.S.E., Professor of the Institutes of Medicine in the University of Edinburgh, &c. London: J. and A. Churchill. 1875.

THIS handy little book is intended to aid the student in acquiring a practical knowledge of the various means and appliances employed in the investigation of tissues, and it very thoroughly fulfils the object it has in view. During the last few years many improvements have been made in the mode of examining tissues, and chromic acid, gold and silver staining, osmic acid, and the freezing microtome have introduced a new era into histology. The accomplished Professor of Physiology in the University of Edinburgh has had such long experience in teaching that he well knows the student requires to be taught innumerable details in the use of the microscope—the mode of preparing tissues, the use of cutting instruments, and the methods of mounting specimens—which to one more advanced seem almost self-evident. In the very short compass of seventy-two pages this is all admirably done. After a short description of the instruments required, and of the principal solutions needed for hardening and softening tissues, the exact quantities being given, Dr. Rutherford takes a series of objects, in so many brief lessons, by a study of which the young histologist will be conducted through every tissue in the body. This book should be in the hands of every student, and well supplies a want that has been much felt.

YORKSHIRE ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.

ON Sept. 17th an association under the above title was formed at the house of S. W. North, Esq., Castlegate, York. There was a considerable gathering of medical officers of health from all parts of Yorkshire, the important districts of the county being well represented.

The meeting took place in reply to an invitation circular issued by Mr. North, who was unanimously voted to the chair. The president informed the meeting that a considerable number of officers of health who were unable to attend had expressed their cordial approval.

Preliminary rules were drawn up, the objects of the Association (as had been well defined by Dr. Parsons) being stated to be, "to promote the progress of sanitary science, to watch the course of legislation on subjects relating to the public health, and to afford mutual counsel and support to medical officers of health."

The following gentlemen were appointed members of Committee, with power subsequently to add to their number:—President: Mr. S. W. North. Members of Committee: Mr. T. Britton, Halifax; Mr. T. Deville, Harrogate; Mr. G. Goldie, Leeds; Mr. E. B. Hicks, Easingwold; Mr. H. F. Parsons, Goole; Mr. W. S. Wade, Wakefield. Hon. Treasurer and Secretary: Mr. J. S. Wesley, Wetherby.

The secretary was empowered to issue circulars to every public health officer in Yorkshire, stating the objects of the Association, and the next meeting of the Association was appointed to be held at the public offices of Dr. Goldie, Corn Exchange, Leeds, on October 27th, at 3 o'clock, members of Committee being requested to attend at 2 o'clock.

MAUNSELL MEMORIAL FUND.

A MEETING of the friends of the late Dr. Toler Maunsell was held last week. The chair was taken by Dr. H. Kennedy, Vice-President of the College of Physicians. There were also present Dr. Stewart, Dr. O'Leary, M.P., Dr. Hayden, Dr. Atthill, Mr. O'Grady, M.B., Dr. Peele, &c. &c.

It was moved by Dr. Stewart, seconded by Dr. Neary, and resolved—"That considering the valuable services rendered by the late Dr. Daniel Toler Thomas Maunsell to the public and the medical profession, by his writings on the Poor-law and the public medical services, and his zealous and untiring efforts to improve the position of the Poor-law medical officers throughout Ireland, his memory is entitled to some substantial mark of public respect."

The following resolution, moved by Dr. O'Leary, M.P., and seconded by Dr. Peele, was adopted—"That a subscription list be opened with a view of raising a Maunsell Memorial Fund. This fund to be applied to the educating and forwarding in life of Dr. Maunsell's family, who at present are insufficiently provided for.

Amount already acknowledged	£79	3	6
The Rev. James Baxter, C.C.	1	0	0
Dr. Benson, Sheffield	1	1	0
B. Banks, Esq., Sec. Loc. Gov. Board, Ireland	2	0	0
Dr. Burnside, M. O., Clondalkin	1	0	0
Dr. Cahill, Ballynascargy	0	5	0
Dr. Chapman, M. O., Donnybrook	2	2	0
W. Colles, F.R.C.S.I.	1	1	0
Dr. Connolly, Multyfarnham	1	0	0
Mr. Henry Coulter	1	1	0
E. W. Collins, M.D.	1	1	0
Dr. Davey M. O., Teresure	1	0	0
Dr. Davys, Swords	1	1	0
R. Donnell, Esq.	1	0	0
Dr. Dwyer, Camden-street	0	10	0
Dr. Denham	1	0	0
John Ferguson, M.B., North City Dispensary	1	1	0
Dr. Finegan, M. O., Glasnevin and Finglas Dispensary ...	1	1	0
Edward Gibson, Esq., Q.C., M.P.	2	0	0
E. Dwyer Gray, Esq., "Freeman's Journal"	1	1	0
Rev. S. Haughton, M.D., F.T.C.D.	1	1	0
J. S. Hughes, F.R.C.S.I.	1	1	0
Jas. Hynes, Esq.	1	0	0
Patrick Joseph Hayes, M.H.	1	1	0
Dr. Hayden	2	2	0
Dr. L.	0	5	0
Dr. Lavler, R. D. L. Asylum	1	1	0
Francis Mayberry, M.B., M. O., Kenmare	0	10	6
George Mayberry, M.D., Kenmare	0	10	6
Dr. Charles Maunsell, R.A.	35	0	0
J. W. Moore, M.D.	1	1	0
Dr. Hyman Marks, South City Dispensary	2	2	0
Dr. Murphy, Camden-street	0	10	0
Dr. Neary, M. O., Howth	1	0	0
Dr. Newland, Richmond-street	1	0	0
Dr. Nicholls, Longford	0	10	6
W. H. O'Leary, F.R.C.S.I., M.P.	3	3	0
Dr. Parcell, South City Dispensary	2	0	0
Dr. Seward	1	1	0
Dr. Strahan, Castletown-Geoghegan	0	5	0
H. E. Swanzy, M.B.	1	1	0
Henry H. Stewart, M.D.	5	5	0
Dr. Stock, Camden-street	0	10	0
L. M. Tabuteau, M.B., M. O., Portarlington	1	1	0
S. G. Wilmot, F.R.C.S.I.	1	1	0
Albert Walshe, F.R.C.S.I.	2	2	0

THE LANCET.

LONDON: SATURDAY, OCTOBER 2, 1875.

WE deem it desirable this week to consider the general question of specialism and special hospitals, and to endeavour to show wherein either or both may be commendable and wherein they are open to censure, if not to distrust. Specialism, it must be confessed, is to some extent the inevitable consequence of the progress of the science and art of medicine. The rapid strides made during the last fifteen or twenty years in the domains of physiology and pathology, the modern employment of physical modes of examination, the exact methods of diagnosis, the enormous increase in our knowledge of therapeutics, have not only added greatly to the skill of medical men, but have rendered the subdivision of labour more or less necessary, and have led to the institution of special branches of study and practice. If we reflect on the changes that have been wrought in the theory and practice of medicine and surgery by the introduction of the stethoscope, the ophthalmoscope, the laryngoscope, the otoscope, and other mechanical aids to diagnosis, it must be confessed that it is scarcely possible for any one man to excel in the employment of all these apparatus, or to thoroughly comprehend all the multifarious phases of morbid action which the regular and skilful employment of these appliances may disclose. But even this does not justify the existence of such a large number of specialties as we have at present. We do not require, as practitioners of medicine, men who can only use the laryngoscope or the otoscope, nor should we encourage men whose mental vision cannot penetrate deeper than a patient's skin. Surely the average intelligence of man can grasp the knowledge of the ailments of more than a cubic inch of the human body. Everyone, in fact, who engages in the practice of the healing art, and *ipso facto* takes upon himself the responsibility of guarding the health and even the lives of his fellow-creatures, should endeavour to acquire sufficient skill in the use of every apparatus for physical examination as will at least enable him to recognise the presence of disease, even though he should prefer to submit the subsequent management of the case to some one more experienced than himself. But we then produce a specialty. It is the unavoidable multiplication of the departments of practice and the great extension of each department that has led to modern specialism. So far specialism is quite legitimate. Unusual opportunities for observing and studying certain diseases or a certain class of diseases occur to some men, or it may be they purposely devote themselves to the consideration of particular diseases which stand, as it were, by themselves outside ordinary routine practice. It is only natural, when they have thus acquired special skill and knowledge, that they should desire to make them available to others.

This, of course, is not the kind of specialism we object to. The kind of specialism that we condemn is that false specialism practised by those who are either incapable of understanding more than a very small portion of the wide subject of the science and practice of medicine, or seek in the covert and ambiguous paths of specialism a short and easy way to lucrative practice. Not unfrequently they rent a small house in a back street, to which they give the name of hospital for this or that, dubbing themselves chief physician or surgeon according to their fancy, while they procure as members of the committee their needy relatives or some members of the decayed gentry, whose only chance to be known at all consists in having their names printed on the prospectus of the pseudo-hospital. Then follow the impudent appeals to the public—appeals which are not unfrequently downright dishonest, and really made for the purpose of remunerating the medical staff and the committee for services they have never performed, inasmuch as they have had neither patients nor furniture. It is surely time that the public should open its eyes to this serious scandal and refuse to be further imposed upon by the charity swindles. No one charitably disposed should subscribe to an institution the reputation of which is not well known, unless he first take the advice of someone who is acquainted with the hospital system. The Charity Organisation Commissioners are generally in possession of useful information respecting the metropolitan hospitals, especially the shaky ones; and from the report of the Hospital Sunday Fund Distribution Committee a very good estimate may be formed of the merits of particular institutions.

Finally, to come nearer home, we would warn students—whether they are entering on their medical career now for the first time, or have already completed part of their curriculum—to regard special hospitals with a jealous eye. Students, especially the senior ones, with a mistaken zeal for knowledge, are, we fear, too apt to neglect their own tried teachers and to run to special hospitals, in the vain belief that they are adding greatly to their store of experience by listening to the oracular utterances of the presumptuous and self-elected instructors who preside at these places; whereas, if they saw things in their true light, they would find that their new love was, in ninety-nine cases out of a hundred, immeasurably inferior to the more modest but better-educated teachers attached to the tutorial hospitals.

THE ninth series of half-yearly Reports supplied by the surgeons to the Customs at the Treaty ports of China have just been published, and contain much information of considerable interest to the profession generally, as well as to those who, by connexion with the locality, are more immediately concerned. These Reports originated, our readers may remember, with the Inspector-General of Customs at Peking, who thought it well to take advantage of the peculiar opportunities which the surgeons at the Custom ports of China possess of gaining accurate information concerning the medical circumstances of the inhabitants of the country and of the locality. The series just issued comprehend Reports on Kiukiang, Shanghai, Peking, and Foochow, by the surgeons stationed at the respective ports, arranged for publication by Dr. JAMIESON, of Shanghai.

The individual Reports vary in the information they contain according to the medical opportunities which the stations respectively present. At Foochow Dr. SOMERVILLE has nothing but meteorological observations to record; while the accounts from Shanghai and Peking are of very considerable medical interest; their authors, Drs. JAMIESON and DUDGEON, deserve great credit for them.

Among the prevalent zymotic diseases small-pox takes the most conspicuous position. It has existed as a severe epidemic throughout the east of Asia, and is still now frequent in China and in India. To what extent vaccination is employed does not appear, but it is receiving the countenance of persons in high position, the little Emperor having been vaccinated, as well as the Emperor and Empress of Japan. Whooping-cough is prevalent among foreign children at Peking. The increase in diseases connected with insanitary conditions, such as typhoid fever and erysipelas, at Shanghai, is very suggestive of evils which must be hard to remedy where the means necessary are so foreign to the habits and customs of the people. Among curious facts mentioned with regard to the Chinese is the prevalence among them of hæmoptysis. Hæmorrhage from the lungs is both frequent and severe, but there seems to be an immunity from what are here its usual consequences. Persons are often subject to the disease for years, following some of the roughest and most exposed occupations, without evidences of further lung mischief. It is worth inquiry whether there may not be here some unusual condition of the lung causing the hæmoptysis, such as miliary aneurisms. Aneurism of large vessels and heart disease—in Peking at least—are very rare.

A curious association of boils with malarial poisoning is mentioned by Dr. JARDINE. Simultaneous attacks of intermittent fever and of boils among members of the same family in the same household were met with. "On one or two occasions neuralgia preceded the outbreak of the boils, and many had an attack of fever ushering them in. If there was a recurrence of the paroxysm of fever no boils appeared, and when boils presented themselves there was an end to the fever." It is said that in certain malarious districts of America an attack of boils is considered a safeguard against an attack of intermittent fever. In all Dr. JARDINE's cases quinine was found beneficial, not only in hastening suppuration, but in preventing a recurrence of the attack.

Perhaps the most interesting portions of these Reports are those in which incidentally descriptions are given of various points in the native pathology and practice. The systematic elaborateness which is so characteristic of Chinese theory shows itself conspicuously in their descriptions of disease. The accounts of disease which are given in the native medical books are very full; the supposed causes, symptoms, and varieties being described with great minuteness and refinement. They recognise many varieties of disease, founding them on principles not altogether different from our own, depending especially on the supposed causes, characteristic features, or imagined relation to viscera. They apply the same form of classification to many diseases, and are specially fond of adopting the division founded on the five senses, or on the five viscera which they enumerate—the lungs, heart, liver, stomach and spleen, and the kidneys, according as the stress of the disease seems to have fallen on one or the other of these. They enumerate, for instance, five different forms of small-pox corresponding to these five viscera. The medical works are most voluminous. It is the custom to state whatever any previous writer has said on the subject, and, in addition, to give the views of the writer himself, no attempt being made to point out the errors of preceding writers or to sift the true from the false.

Walnuts are ordered in disease of the testes; the Siberian crab in ulcer of the breasts. The latter may suggest a curious association with cancer of the breast; but cancer is not recognised as distinct from ordinary ulcers, and the Chinese can with difficulty be prevailed upon to submit to any special treatment for it. In accordance with the same principle we find that a favourite remedy for impotence is the penis of certain animals, that of the dog, ass, or deer being preferred on account of their respective qualities of hardness, length, and strength! The testicles of the deer are also taken for the same purpose. In the list of remedies for every disease we have an equally absurd series of agents, some selected on the same principle, others having no apparent association with the disease to be cured. For instance, fifty different remedies are enumerated as accelerating, and an equal number as easing, parturition. None of the former, except perhaps camphor and iron, have any western reputation for the purpose. The list includes the most fanciful and disgusting compounds. The comb of a black cock and a husband's garters are among the least repulsive. The Chinese doses are always large. The habit, consequently, acquired of swallowing large quantities of the medicines prescribed renders it dangerous to entrust them with any considerable quantity of a powerful drug, and has been found a troublesome characteristic in dispensary practice. Arsenic, for instance, cannot be used for ague on this account. The Chinese doctors rarely prescribe powerful foreign remedies on account of the uneasiness their potency excites. Indian hemp is one of the agents of which the Chinese physicians are afraid; and yet it affords a striking illustration of the manner in which, as we have said, some of our important methods of treatment were anticipated long ago in China. It is supposed, Dr. DUDGEON informs us, to have been the substance used by a celebrated surgeon, HWATO, who flourished A.D. 220–230. "It is mentioned in the 'Collection of Ancient and Modern Medicine'—a book published in the beginning of the 16th century,—that, in acupuncture and in applying the moxa, HWATO gave a preparation of hemp, which in a short time produced such anæsthesia as if the patient had been either drunk or dead. During this period of loss of sensation, openings, cuts, amputations, &c., were performed without the slightest pain being felt." Fumigation is the common method of treating asthma in China. Curiously enough, one prescription for a compound to be smoked contains an ingredient which is said by many botanical authorities to be stramonium itself. It is a drug introduced from abroad. It is remarked how many foreign substances have found their way into the Chinese herbal. Some were introduced from India by the Buddhists and others, and have retained their foreign names, at least to such an extent as to admit of their identification.

Another remarkable fact is that the Chinese treatment of syphilis for the last 2000 years corresponds very nearly with our modern therapeutics. "Calomel, cinnabar, and realgar are among the recognised formulæ, and the calomel enters into every prescription." Prescriptions are also given to drive out the poison of calomel after it has effected a cure; and for this is used a kind of sarsaparilla, which is prescribed with an aperient. Moreover, we have been anticipated even in the method of employing mercury in syphilis. Fumigations and vapour mercurial baths, both local and general, are employed by them. One prescription for the purpose contains lead and mercury, cinnabar, olibanum, myrrh, dragon's blood, realgar, and aloes-wood, the whole to be pulverised, wrapped up in paper to form a wick, and put into a lamp. The patient is to be covered over, and inhale through the nose, taking cold water into the mouth to preserve the teeth. Secondary and tertiary symptoms are regarded as not so much a further development of the disease as of the calomel—a notion also not confined to the Celestial Empire. Foreign medical men have much surgical practice. That branch is somewhat lightly esteemed by the native practitioners, who have more faith in their skill for the cure of internal diseases which are hidden, and hence beyond the scrutiny of the patient. Native surgery consists chiefly of acupuncture, the moxa, and plasters, and is relegated to druggists, street quacks, and Mongols. It is satisfactory to learn that the Chinese seldom blame the profession for any untoward course their diseases may take. Death is ascribed to fate, and any unfavourable symptoms are accounted for on the supposition that they have caught cold. The life of many an English practitioner would be relieved of much needless worry were his patients equally philosophical!

WE commend to the careful study of our readers the lecture "On Softening of the Brain," by Dr. J. HUGHLINGS JACKSON, which we published on the 4th of September. It contains very much that is suggestive on this subject, not only in the region of diagnosis and pathology, but also in that of therapeutics. The precision of thought and language, the strict adherence to what is justified by clinical and pathological observation, which form always such a valuable part of Dr. JACKSON'S treatment of a question, are very noticeable in this communication. And the subject is one which is of immense importance in practice. There is a great deal of talk nowadays, even in common parlance, of softening of the brain. Happily, we can say now, on Dr. JACKSON'S authority, there is a great deal too much talk. That is to say, people, even educated people, talk about softening of the brain where it does not exist. The cases thus wrongly called softening of the brain are really cases of nervous exhaustion, to be remedied by simple common-sense care. Supposing a man to have exhausted his system by excess of any kind—excess of work, by sexual excesses, by various excessive excitements,—and to display in more or less perfection the group of symptoms described by Dr. JACKSON—irritability, despondency, slight power of attention, feeling of pressure or burning at the back of the head, a "queer," "intolerable" feeling at the upper part of the spine, often intermittent;—supposing a man to have these feelings and no others, Dr. JACKSON believes that they are to be removed by "common-sense care"—that is to say, by proper regulation of work and passion and habit.

The great point which Dr. JACKSON insists on is that softening of the brain is essentially a localised disease, never affecting the general body of a hemisphere, but a more or less limited spot, answering to a certain arterial supply; secondly, that it means bad *arteries*—that is to say arteries blocked either by embolism or by thrombosis, more frequently the latter; and, thirdly, that the symptoms of such a real lesion as this are very real, though negative, consisting of loss of faculty—such as loss of speech, loss of power over one side. Though there are cases of temporary loss of speech and hemiplegia which do not admit of this explanation, and indeed are still very inexplicable, all those who have watched the progress of recent pathology will agree with Dr. JACKSON, and thank him for giving out the truth with so much plainness—that the reason why the highest part of the motor tract (corpus striatum) and adjacent convolutions are usually the parts to suffer damage—softening—is simply a mechanical one: viz., that they are supplied by the middle cerebral artery, which often gets blocked up. Being in the direct line of the circulation, this artery is most liable to receive a fibrinous plug from the heart, or by the strain of the circulation to have degenerative changes set up in it leading to diminution of its calibre and blocking. There may be general mental symptoms preceding and following this grave and very defined interruption of a given arterial supply; but the direct effect and proof of it is to be found in such symptoms as hemiplegia, or loss of speech, without loss of consciousness. An important part of Dr. JACKSON'S lecture is that in which he discusses the significance of what he calls general mental symptoms positive and active, as distinguished from special mental symptoms of a negative character; the more so as he shows that decided therapeutical courses depend on the intelligence with which we discern this significance. Dr. JACKSON calls the grave symptoms, really indicative of serious brain disease, *physical*—such as gross motor affections, convulsions, and paralysis,—in contradistinction to what he would call the *mental* symptoms—illusions, delusions, grotesque actions implying an *over-excitement* of the lower nervous arrangements *permitted* by the loss of control of the higher nervous arrangements.

Good practitioners will not fail to receive the caution which Dr. JACKSON gives as to depleting patients suffering from sudden loss of speech or from hemiplegia, on account of symptoms falsely supposed to indicate inflammation of brain membrane or tissue, but which are really due, some of them to the mere excitement of the attack, and others to the debility and anæmia of the brain resulting from the sudden stoppage of food supplies. It is to be feared that too many still treat a brain suddenly failing as if it were strong and over-nourished, instead of remembering that the very occurrence of loss of faculty is a proof of such a state of vessels as involves impoverishment and starvation of brain-tissue. Dr. JACKSON says "we should be cautious how we begin to change a man's habits, even bad habits, very soon after an attack of hemiplegia." Of course Dr. JACKSON would not wish us to overload the stomach with

food or to charge the blood with alcohol. If we rightly apprehend his meaning, it is to the effect that no sudden changes in diet should be made which will have the effect of lowering the arterial tension and the supply of pabulum to the parts of the brain geographically furthest from the heart.

There are two points in Dr. JACKSON'S lecture of the highest interest upon which we should desire to hear more fully from him. The first is the opinion which he expresses that we shall find the explanation of the neuroses proper, such as chorea and epilepsy, in the condition of the arteries: "*My own belief is that in this direction of inquiry we shall find out the pathology of the neuroses. I do not believe that chorea and epilepsy are nervous diseases in the sense that the pathological changes* BEGIN *in the nervous tissue.*" Considering our ignorance of the pathology of these diseases—that they occur at periods of life when degeneration of arteries does not exist—that their whole character, history, and causation differ so much from those of softening, hæmorrhage, &c.,—this seems to us a very bold opinion. But Dr. JACKSON is not given to speak without data, and we look confidently for some justification of his opinion.

The other point is that, allowing the dependence of such diseases as softening, hæmorrhage, &c., on arterial changes to be, as Dr. JACKSON says, affairs of arteries, the question of heredity yet remains. It may still be true that arterial degeneration in some families will take the shape of diseases of the nervous system more than in other families. It nevertheless is of vital importance to realise the truth that the causes of paralysis are primarily in arteries, and not in the nervous tissue itself. We seem to know something of, and have some control over, the causes of arterial degeneration; and perhaps the best way in which we can preserve the integrity of arteries is by cultivating such habits as tend to preserve the integrity of the great eliminating glands, such as the kidneys and the liver.

Annotations.

"Ne quid nimis."

THE INTRODUCTORIES.

THE 1st of October, and with it the commencement of the academical year, has again come round, and teachers and students with their friends have again exchanged their greetings and listened together to the time-honoured "introductories." Nor have these been wanting in the diversity which has been their most distinctive feature of late years, which seems to render it necessary for each one who delivers such an address to define what in his opinion is the object and scope of an introductory, and to enter upon a defence of his own particular view. It is not our purpose now to discuss the origin and utility of introductory addresses in general, especially as we have often had occasion to expound our views upon the subject. We believe that they may be made extremely useful, if rightly directed; and we should much regret to see the example of the one hospital which has given them up generally followed. To the student who is freshly entering on his medical studies the "introductory" is a momentous affair; to his uninitiated mind it is a mysterious ceremony, at which he will first, with bodily vision, see those distinguished men by whom he is to be trained and taught, and whose names he has already learned to reverence. He anticipates, moreover, that he will receive some direction as to the conduct of his future work, or that the veil will be lifted to give him a glimpse of the mysterious land of knowledge which lies before him, and of which he is as yet profoundly ignorant. To the more advanced student it is a return to work in which he has already made advances, but where there are ever new fields of interest opening up in which he needs not only instruction but guidance and example to enable him to overcome the difficulties which beset him. And to him, as well as to the teacher and practitioner, the opening address is a fresh trumpet-call to the onward march in the noble work of advancing science and curing disease. Such, we trust, will be the effect of the addresses this year; their results will, we hope, be seen in the character of the work of the session now commencing.

VACCINATION.

THE Appendix to Mr. Simon's last Annual Report on Public Health (to which special reference was made in THE LANCET of last week) is mainly occupied by a most valuable report on vaccination and small-pox, compiled by Dr. Seaton, assistant medical officer to the Local Government Board. It includes the first annual return under the Vaccination Act 1871, and has reference to the children born in England and Wales in 1872. It appears that of 821,850 births returned to the Board by the several vaccination officers in the kingdom as registered during that year, 698,137 (or 85 per cent. of the whole) had been registered as successfully vaccinated at the time the return was made; 1693 (or 0·2 per cent. of the whole) had been registered as unsuccessful (after having been, of course, unsuccessfully vaccinated three times); 905 (or 0·11 per cent. of the whole) as having contracted small-pox before they could be vaccinated; and 78,594 (or 9·5 per cent.) as having died before they could be vaccinated; leaving 42,527 (or 5·1 per cent. of the births) still to account for. If from the 821,856 births deduction of the deaths without vaccination be first made, it appears that of the surviving 743,262 children about 94 per cent. were returned as successfully vaccinated, 0·35 per cent. as either insusceptible of vaccination or having had small-pox, and 5·72 per cent. as still to account for. A further analysis shows that the cases not finally accounted for consist of those in which vaccination was at the time of the return postponed on account of the child's health, or cases removed from the district or place of birth before vaccination, or in which the operation, though performed successfully, could not be registered as such, because the legal certificate had not been received by the vaccination officer. The number of direct refusals on the part of parents to have the operation performed constitutes an utterly insignificant proportion of the cases unaccounted for.

Having regard to the fact that this was the first year's working of the Act, that 1400 local officers were employed acting under the direction of 647 boards of guardians, and that the duties devolving on these officers were new, it must be acknowledged that the results are very satisfactory.

An examination of the cases not finally accounted for, shows that the proportion in the metropolis considerably exceeds the average of the rest of the United Kingdom, due probably to the large number of lodgers, and also to frequent removals.

A total of 275 unions were inspected last year, with reference to their proceedings under the Vaccination Acts of 1867 and 1871, and the sums awarded to public vaccinators for successful work amounted altogether to £8204. There are 23 vaccinating stations in England, 1 in Edinburgh, and 2 in Glasgow; and of these the Surrey Chapel,

Tottenham Court Chapel, Pimlico, Westminster, Marylebone, Whitechapel, and Strand establishments are also vaccination stations, as well as those at Manchester, Birmingham, Bristol, Liverpool, Newcastle-on-Tyne, Leeds, Glasgow, Edinburgh, Exeter, and Sheffield. During the year 12,963 charged ivory points and 30,045 charged tubes (each estimated as equal to 10 ivory points) were supplied from the stations, 10,478 applications for them having been made—viz., 9320 from practitioners in England and Wales, 4 in Ireland, and 237 in Scotland, 533 from the Army, 76 from the Navy and Emigration Department, 206 from the colonies, and 102 from the diplomatic and other foreign sources.

SICK NURSES AND THEIR COSTUMES.

THERE is a popular saying that no one can be "a good nurse without being a born nurse," and there is just that amount of truth in the expression which everyone can appreciate. It would be more correct to say, however, that some persons would never become good nurses with any amount of teaching; they lack the temper, tact, gentleness, fortitude, and intelligent appreciativeness necessary to make a nurse. But, good, bad, or indifferent, rich or poor, it falls to the lot of most women at some time or other of their lives to have to discharge the duties of an amateur nurse to a sick child or relative, and there is a right and a wrong way in this as in everything else worth doing. To begin with, most people, and especially sick people, would prefer to have a fresh, comely, and cheerful attendant to a bilious-complexioned, funereal-looking old "frump." And this reminds us that there is much room for improvement in the matter of the personal attire of nurses. It is common enough for a medical man to be called to a case of grave illness in some household where the patient is being nursed, and often very badly nursed too, by some one or more near relatives, who are already worn out with watching. The first thing to be done is to secure the services of some trained nurse, and if she turns out a good one, as is usually the case—for the Gamp variety is happily as extinct now as the dodo,—the benefit of her presence in the household is little short of a blessing to everyone. But there are the scruples of relations to be overcome; they have an affectionate solicitude for the patient which a stranger cannot feel, and they often seem to regard the presence of a professional nurse as an abiding gloom, instead of welcoming it as a great relief from worry and watching. This is to some extent to be attributed, we think, to the feeling associated with a nurse's costume. While so many ladies and others, who are unselfish and devoted in the discharge of their duties as nurses, are not content with doing good for its own sake and for its own reward, but must conform to some system, and attach themselves to this or that ecclesiastical or religious society, we must expect that there will be uniformity in the matter of their attire, indicative of the order to which they belong rather than of the duties they have to perform. At the good that is done we rejoice, but we think that the usefulness of such people is often much restricted in this way. The sick poor, for example, speedily discriminate the difference between sympathy and services rendered primarily and exclusively to and for themselves, or only to them as a means to another end. Moreover, sick people are every bit as fastidious in their tastes as healthy people, and whilst we attend to the æsthetics of a sick room by flowers and other pleasant objects, why should nurses be so often attired as if for a funeral, in black and white? There is no more excuse for a nurse making a "guy" of herself than for her being decked out in vulgar finery, with her hair got up after an elaborate style which it would take her half the day to arrange. Print dresses of pretty pattern, or grey alpacas, according to season, with a light white cap, linen cuffs and collars, scrupulously white and clean, and a coloured neck ribbon, would, it seems to us, be infinitely preferable to the black costumes of the sisterhoods.

THE FACTORY POPULATION.

SOME few weeks ago we took occasion to draw the attention of our readers to a report by Dr. Ferguson, at Bolton, which referred very distinctly and emphatically to the progressive degeneracy of the factory population. Mr. Redgrave, senior inspector of factories, in his last official report, demurs to the conclusion and the evidence upon which it is founded. He says: "Before we can accept as proved the statement that the factory population is degenerating, a very clear and detailed publication of facts, gathered not in one town only, but in fifty towns, must be presented to us." The inspector then, speaking as a layman, avers that since 1848 there has been a material improvement in the physical condition of the English operatives, and that although the factory hands in some of our densely-populated towns may not compare favourably with those who worked in what were some time ago country districts, the workers in the smaller textile towns and villages of Lancashire and Yorkshire are as well-grown, as well-developed, and as healthy as the working classes in any county in the kingdom. Mr. Redgrave doubts also whether there is either an increase of immoral habits or in the consumption of alcoholic drinks. "The breaking-down of the health, the curved spine, the deformity of the extremities, are not now to be met with," but there is an increased and increasing employment of women in factories. The official returns in 1848 gave an average of eighty females above thirteen years of age employed in the Lancashire cotton factories, whereas one hundred is the average at the present time. Evidence has been given frequently of the disastrous consequences to child-life and infant development by the working of the mothers in factories. "The abstention from factory labour of women for a month or six weeks after confinement would to a small extent mitigate the evil as regards their more certain retention of health, but it would not touch the evils of the loss to the infant of its natural food and of maternal care and love while abandoned to the indifference of a sordid nurse and the baneful influence of a soothing cordial." There can be no doubt that the evil thus described by Mr. Redgrave demands serious attention, and our legislators should endeavour to protect the health of the mother and the well-being and physical development of the offspring.

BOGUS DEGREES.

CAN nothing be done by Congress to regulate the system by which medical diplomas and degrees are granted in the United States? We gather from our own correspondence with members of the profession in America that they sincerely desire that more strictness should be exercised in the legal recognition of practitioners. Not long ago we were asked for information as to the working of our own Medical Act by practitioners who were desirous to see it applied in the States. The letter which we published last week from his Excellency the Acting Commissioner of the Bureau of Education, Washington, to Mr. Sparkes, of Shelton, Stoke-on-Trent—part of a correspondence which has been kindly forwarded to us—shows that the American Government is not uninformed as to the existence of "fraudulent" institutions in the States which supply "handsome diplomas and certificates of registration" for money considerations only. It is gratifying to have the assurance of the Acting Commissioner that one such institution has had its charter withdrawn, and that it has no "actual or

legal existence." But the evidence is still considerable that something representing it still exists, and is not alone, to supply degrees to those who have more money than self-respect. Mr. Sturman, of Packington-street, N., in his letter published last week by us, says, "I can influence you (*sic*) the diploma A.M. and Ph.D., B.Sc., or D.Sc., &c., *from several universities in the States.*" Dr. P. F. A. Van der Vyver, of Jersey, makes a similar offer to Mr. Sparkes in the course of the correspondence above referred to and now before us. It is not enough for the satisfaction of public opinion, either in the States or in England — for England is greatly interested in the condition of the medical profession in the United States—to be told by the Commissioner that no respectable institution in the United States confers degrees for money. What we want to know is, not only the number of institutions covered by Mr. Sturman's expression, "several universities in the States" which sell degrees, but also the number of universities, colleges, or medical societies in the States that have the serious power of granting degrees or diplomas, and, further, the extent to which they are supervised by any body answering to our own Medical Council. We know too well, even with a body specially created by Parliament to superintend our nineteen examining bodies, how possible it is for unfit men to enter the profession. We know how much worse it is and must be in the States, where every State is a law to itself in this matter, and recognises anything that looks like a diploma. We have reason to believe that Congress, at its next meeting, will be asked to pass a law in the direction of our own Medical Act. We devoutly hope it will accede to this request. We do not write in the interest of any medical theories. We only want, for the sake of human life and progress, that men practising the calling of medicine in the States shall give evidence of their knowledge of anatomy, physiology, and of the means by which disease may be detected and treated. We know that there are schools of medicine in the States not to be well excelled in Europe, but Congress owes it to these schools and to its own citizens to, if it can do so, withdraw all legal recognition from the multiplied societies which can show no adequate means for educating and examining students, and give no adequate excuse for their own existence as licensing bodies.

THE CONTAGIOUS DISEASES ACTS.

AT the recent International Medical Congress at Brussels an interesting and useful discussion was provoked by a communication from Dr. Chapman, in which it was attempted to be proved that the surveillance of prostitution is to be condemned because it leads to clandestine immorality. Dr. Sigmund, of Vienna, on the other hand, stated that since a system of surveillance had been adopted there a remarkable diminution had taken place in diseases of this character, both as to the number of cases and their virulence. Dr. Vleminckx, the President of the Congress, declared that the mastery over the scourge in Belgium had been obtained only by a system of legal surveillance, adding, at the same time, that he was unable to understand why England, which decreed obligatory vaccination, does not take a like action in this matter; the maintenance in England of the English way of treating this grave question appeared to him a danger for the whole of Europe. This is the view, we are glad to see, held by nearly all continental physicians, and others having a really practical knowledge of the subject, as opposed to those, whether in this country or abroad, whose conclusions are derived from theoretical considerations, or greatly influenced, if not based, upon sentimental ones. In the face of the evils which confront us in daily life, and in opposition to the logic of facts, it certainly seems strange that attempts to limit the spread of one of the direst maladies in the world in a reasonable and common sense way—in the only way, be it understood, that any attempt can be made from its physical side—should have excited so much opposition. It is to be accounted for, however, by remembering the sources from which such opposition has sprung. It has not sprung up in districts where the Acts have been in force, and among people acquainted with the facts, and who have had experience of the beneficial working of these Acts, but in towns and places where the inhabitants have not been able to see for themselves the favourable contrast which a town presents in this respect after such legislation has been extended to it to what it did before. However, we think that we perceive signs of the waning influence of excited oppositionists. There is nothing like a vigorous discussion of the subject in the House of Commons, and a rigid scrutiny of the assertions and arguments of those most violently opposed to these Acts, for demonstrating the inaccurate and fallacious character of what has been advanced against them. Instead of declaiming against the existence of the present laws, it would be wiser to inquire whether the measures adopted for the prevention of contagious disease were not still insufficient.

ARTIFICIAL RESPIRATION.

SOME nine years ago Professor Schiff, of Florence, in his lectures on the nervous system, announced that in fulminant apoplexy consequent on paralysis of the medulla oblongata artificial respiration—never bleeding—was the treatment indicated. This induction he had reached after numerous experiments on the lower animals. By artificial respiration the blood is saturated with the oxygen, indispensable to life, while the pressure of the circulation is kept low, so as to obviate a new hæmorrhage in the brain. For this reason, to say nothing of the fact that the artificial introduction of air can be regulated according to the requirements of the case, Prof. Schiff prefers the artificial respiration by means of the bellows to the respiration of pure oxygen.

His assistant, Dr. Corso, describes a case in which the efficacy of the practice was well illustrated. A lady having accidentally fallen on her occiput was brought into hospital with fracture of the base of the skull. Immediately on admittance she was found insensible, with her eyes closed, her face cyanotic, the respiration very slow and shallow, pulse small and feeble, and, in fact, all but moribund. Artificial respiration was at once practised. After a few minutes the heart began to beat with greater frequency and force; in twenty minutes' time natural respiration was re-established, and sensibility returned. Next day she had improved to such a degree that she could sit up in bed and eat by herself. The intellect, however, was not perfectly restored, her attempts at discourse being incoherent. This indication of lesion of the cerebral substance increased, till after fifteen days she died. At the autopsy there were found fracture of the base of the cranium, hæmorrhage on the right side extending down to the medulla oblongata, and lesion of the substance of the brain.

The immediate danger in apoplexy lies in paralysis of the medulla oblongata, and consequent impairment of the mechanism of respiration. If this patient had not had, together with the hæmorrhage, lesion of the brain, which is common to apoplexy, whether spontaneous or produced by an external cause, she would (says Dr. Corso) have been saved. By artificial respiration time is given to the brain and medulla oblongata to recover the shock and resume their functions, if not perfectly all at once, still in such degree as to maintain life and make improvement possible.

Even as it was, the patient, but for artificial respiration, must have died within a few minutes after entering the hospital. A great future, thinks Dr. Corso, lies in store for artificial respiration; pulmonary diseases, in particular, seem a fertile field for the practice.

THE POLICE TREATMENT OF DELIRIUM TREMENS.

WE have hitherto supposed delirium tremens to be a disease, doubtless a most improper one to contract, and the circumstance of suffering from which must needs go far, though not always conclusively, to imply a dissipated habit and demoralised character. It now appears that the malady is included in the category of those affections for which the police are considered the best physicians, and to which they apply the universal specific of Scotland-yard—brute force and a *régime* dictated by economy, and the propensity for doing as little as possible, and that little ill. "A fine-looking man, who was evidently suffering acutely from a severe attack of delirium tremens" (we are quoting from one of the daily papers) "was charged (at the Thames Police-court) with attempting self-destruction." The report goes on to describe how the accused was so excited that constables were compelled to stand by him in the dock, and it concludes by informing the public that, after his forcible removal to the cells, his yells were heard, "but they gradually subsided as if he had exhausted himself." He was remanded to the House of Detention for a week. Not a word was said about subjecting the poor creature to medical treatment. Possibly the magistrate may have considered it likely the prison authorities would call in the services of their medical officer, but he did not allude to such a contingency, or suggest that the procedure would be prudent. In short, the magistrate handed over the treatment to the police as unreservedly as if the case were only one of fractured skull described in the charge-sheet as "drunk and incapable." It is difficult to accept this view of the matter as satisfactory. We have no desire to qualify the feeling of righteous indignation which even a stipendiary justice of the peace must feel when he encounters a person suffering from delirium tremens *presumably* brought on by excessive drinking. We do not even wish him to temper justice to the crime of excess with mercy for the victim of a self-induced disease. But we cannot help thinking it will be well to follow the old-fashioned practice of treating all maladies as calling for medical care, without regard to the manner in which they may have been contracted, and punishing the offence *after* proper measures have been taken to cure the offender.

SEA-BATHING.

ALTHOUGH the larger proportion of sea-bathers have, probably, abandoned their healthful exercise, many are asking themselves whether it is prudent to continue the pastime now that the year has entered its autumnal phase, the temperature is generally depressed, and the weather uncertain. Wind, rain, and cold are disagreeable attendants on the open-air bath, and detract seriously from its comfort, if not from its usefulness, to all except the most robust. The expediency of facing the occasional inclemency of this variable season should, for invalids and delicate persons, be a question to be decided by their medical adviser. It is a matter of considerable moment, and one which cannot safely be settled offhand, from the apparent condition of health and weather. Bathing too late in the season is to many persons a cause of cold and rheumatism, possibly even of worse misfortunes, which may last far into the winter. The evil effects of the hazardous experiment may not be immediately perceptible. The vital heat is lowered by the repetition of cold baths, from the "chill" of which the organism never perfectly recovers. The average temperature, or heat-force, is after each bath left a little lower than before. The reaction is not sufficiently prompt or strong to re-establish the normal condition. Sometimes—and perhaps this is the worst event, because the phenomena are deceptive—there is every appearance of reaction. The surface becomes flushed after leaving the water, the heat seems to be restored, and the sensations are agreeable. But the reaction is not natural. The accession of apparent warmth is in fact a slight pyrexia. It comes on too quickly. It is either distinctly febrile, accompanied by acceleration of the pulse and almost hectic flushing, or it passes immediately into a sweating stage, in which the temperature is rapidly depressed and the vital strength exhausted. Medical practitioners will do wisely to inquire somewhat more closely than may at first sight seem necessary into the symptoms exhibited by clients—we mean persons in generally good health—who consult them as to the wisdom of continuing the bath at this critical period. It is just the time when to swimmers and bold bathers the attractions of sea-bathing are especially seductive, but the atmospheric conditions call for unusual care.

THE MORMONS AND POLYGAMY.

THE Report on the Hygiene of the United States Army, with descriptions of the military posts, being No. 8 of the magnificent series of publications issued from the Surgeon-General's office, War Department, Washington, contains a description of Camp Douglas, Utah territory, with some interesting observations by Surgeon E. P. Vollum, of the United States army, on some of the diseases of Utah. The adult population of the Salt Lake Valley are as robust as any within the borders of the United States, and there is a fair number of cases of extreme old age. The weight of sickness falls upon the children, who furnish not less than two-thirds of all the deaths, most of which occur under five years of age. The figures of the register show that the male deaths exceed the female by about 50 per cent. Surgeon Vollum adds that the polygamous children are as healthy as the monogamous, and the proportion of deaths about the same; the difference is rather in favour of the former, who were generally, in the city especially, situated more comfortably as to residence, food, air, and clothing, their parents being better off than those in monogamy. It is, perhaps, too early to express any mature opinion as to the influence of polygamy, as contrasted with monogamy, on the health or constitutional or mental character of the Anglo-Saxon race as seen at Utah; but the reporter states that, as far as his experience has gone, no difference can be detected in favour of one or the other. Polygamy in Utah, as far as Surgeon Vollum can learn, furnishes no idiocy, insanity, rickets, tubercles, struma, or debasing constitutional condition of any kind. The great mortality in the children is confined chiefly to the Mormon population, and it may be traced to absence of medical aid, nursing, proper food for sick children, and neglect of all kinds. Among the many mottoes that decorated the Tabernacle on the last anniversary of the advent of the Mormons into Utah, was "Utah's best crop: children." Abundance, says Surgeon Vollum, doubtless cheapens the value of anything, children as well, especially when the issue of several women are begotten in poverty, and all mingled together and contending like birds in a nest for the morsels within reach. The children of Salt Lake city may often be seen in groups insufficiently clad, the lower half of the body bare, playing about in the cold water that flows directly from the mountains and down each side of the streets. The consequence is catarrhs, pneumonias, fevers, and bowel complaints. The nonsensical mummery of "laying on of hands" is taught and

practised by the priesthood, and the faithful and the ignorant resort to it with confidence for the cure of disease. Some observers imagine they notice a saddened expression of countenance on the Mormon children—that they have not the cheeriness and laughter common to that age; especially that the young women, who here are robust, ruddy, and well made, lack the amiable, bright, and cordial countenance characteristic of young women everywhere; and they attribute this supposed dulness of face to the pre-natal influences of the polygamous relation on the mothers. "Certainly," adds Dr. Vollum, "I have thought at times that there was some truth in the notion."

COEXISTENCE OF LUPUS AND CARCINOMA.

THE interesting fact of the occasional supervention of cancer upon lupus has received fresh confirmation at the hands of Professor E. Lang, of Innspruck (*Vierteljahr. für Dermatol. u. Syph.*, 1874, p. 165), who records a well-marked instance. He believes that many cases previously recorded were simply examples of the extension of the original lupoid affection, which would render the number of cases in which the combination occurs very limited. Of these cases two divisions may be made—viz., those in which the cancer springs up on the site of lupoid scars, as it frequently does on simple scars, and those in which both the cancer and lupus extend *pari passu*. The case which forms the subject of his paper was one of the latter group. The patient was a young man twenty-five years of age, admitted into Professor Heine's clinic at Innspruck in March, 1873, who had been the subject of lupus from the age of about three years, the disease commencing on the right side of the face and the left arm, gradually extending to the forehead, left side of face, and forearm. When admitted the face was almost entirely converted into a smooth, hard, somewhat reddened cicatrix, here and there covered by layers of exfoliating epidermis, and bordered by well-marked lupus nodules. The right lower eyelid was everted and the right cornea opaque; the cartilaginous part of the nose was absent. Between the upper lip and right lower eyelid was an ulcer the size of a finger-nail, with sharp undermined edges and irregular base. This ulcer had commenced in the previous autumn, and was accompanied by enlargement and softening of the lymphatic glands behind the right ear and in the neck. At the bend of the elbow was a lupoid cicatrix fringed by nodules, and another with tubercular eruption on the dorsum of the hand and fingers. Many scars occurred elsewhere on the trunk and limbs. The patient had been under treatment at various intervals for ten years. Professor Lang thought that the ulcer on the cheek was carcinomatous, although its margins were not indurated or everted. It rapidly extended whilst under observation, the lymphatic glands also breaking down. Microscopical examination of the discharge from the ulcer revealed numerous epithelioid cells, some being large and round with thick cell-walls, others multiangular, or spindle-shaped, and various shapes presenting grooved nuclei (Furchungkerne), which Lang and Gussenbaur have shown to be characteristic of rapidly growing cancer, a character presented by the nuclei of cells of all rapidly growing organisms. Before death, which took place two months after the patient's admission, there was widespread ulceration of the whole cheek, laying bare the mucous membrane, and of the side of the neck over the diseased glands. Post mortem, secondary nodules were found in the pleuræ, left lung, and liver. The microscopical characters of the ulcer on the cheek are most fully detailed. They may be summed up here as presenting the characteristic lymphoid elements of lupus, arranged mostly in the superficial parts, but penetrated by ramifying "tubes" of cancer cells in the deeper layers. The small round cell forms of the lupus contrasted markedly with the large epithelioid cancer elements. The stroma of cancer was, as it were, formed by the lupus cells; but in no part was any transition between the two varieties of cells to be seen. From the disposition of the cancer cells it is concluded that they mostly had found their way from the blood and lymphatic vessels, some sections showing appearances exactly as if vessels were filled by these cells. Although he has frequently found overgrowth of the cellular elements of the walls of vessels in cancer, yet he has never traced a direct conversion of them into cancer cells. The paper concludes by attributing the terribly rapid evolution of cancer, when grafted on lupus, to the loose and soft nature of the lupoid tissue, the rapid disorganisation of the new growth being aided also by the low vitality of cancer cells—still more diminished by the slight nutrient value of the lupus material forming the stroma of the former.

ICES IN THE STREETS.

IT came out incidentally at the Marylebone Police-court on Wednesday, that a man selling ice-creams in the streets made seven or eight shillings a day. The reflection is distressing. Something like a hundred ices a day must have been consumed from his barrow to yield such a return. It would be interesting to ascertain the amount of suffering inflicted by an ordinarily prosperous member of this trade in cheap and nasty luxuries. There is no reason why the poorer classes should not be regaled with cooling delicacies. They need them quite as much as, perhaps more than, their superiors in social status. But the common street ice is a concoction of dirt and indigestibility which it would be impossible to describe and difficult to realise. Cooling drinks and frozen eatables need to be especially pure and good in themselves, in order to minimise the danger of bad consequences. It is sufficiently perilous to introduce a frigid mass suddenly into the stomach, but when to that risk is added the evil of having swallowed something which no persuasion would have induced a sober person to eat or drink if it were not frozen, the folly of the proceeding is intensified. It would not be worth while to notice the matter, but that the practice of consuming cheap ices is increasing largely among the industrial orders, and particularly domestic servants, who expend a really considerable proportion of their pocket-money on these supposed delicacies. It would be well if either a better article could be supplied, or more caution evinced in the gratification of a natural desire for something cooling and grateful to the palate. There is no valid reason why iced drinks and frozen sweets should be either so dear as to place them beyond the reach of all who are not tolerably well provided with cash, or so bad in quality as to be wholly indigestible.

THE REGISTRATION OF DISEASE.

DR. WALTER DICKSON, R.N., medical inspector of Her Majesty's Customs, gives in his last annual report some interesting statistical particulars, which exemplify in an eminent degree the importance of keeping accurate and systematic registrations of disease as it occurs in large communities of the adult population. The total force of Customs officers in London and at Gravesend under the medical care of the inspector amounts to 923 men. The mean daily number on the sick list was 30·7, or 6·4 of strength. The mean duration of each was, in London 28, and at Gravesend 11 days, the loss of time per man (including Sundays) being 13 days in the one case, and 10 in the other. The total death-rate was 2·1 per cent., and 1 per cent. only of super-

annuation. Both these last figures appear to us exceedingly low, having regard to the fact that these men are out at all hours in all seasons of the year, and are employed in work that in a sanitary sense may, as we remarked some three weeks ago, be fairly denominated as risky. Dr. Dickson says: "The health of the Customs officers in the year was doubtless fairly typical of that of the adult community, which at present can only be partially and imperfectly estimated through the death-rate. The main features of the period were the prevalence and severity of pulmonary complaints and rheumatism in the colder, and of gout in the relatively warmer months. The epidemic character of gout in conformity with the season among this class is specially noteworthy. A total of 39 cases occurred during the year, almost exclusively limited to the London division. It proved most obstinate among the watermen class, occurred irrespective of age, intemperate or abstemious habits, and was remarkably influenced by the weather, warmth and damp occurring in a generally dry season seeming to be especially favourable to its development." The absence of zymotic diseases is also particularly noted. We desire to draw attention to this, among other interesting phases of Dr. Dickson's report, because it is, as far as we know, the only attempt at the careful registration of disease among the civil adult population of this country, and to urge strongly that the example is, for sanitary and scientific purposes, well worthy of imitation. The General Post Office employs a very large and annually increasing staff, and its chief medical officer, as well as its various district surgeons, might furnish a large mass of valuable information. Sickness as occurring in the metropolitan and City police might be similarly classified and reported upon by their respective surgeons, and the medical officers of the great railway companies could add most usefully to the list. Such efforts, exemplified in the report now before us, would pave the way for that invaluable work—a complete registration of disease as well as of mortality throughout the kingdom.

THE USE OF CURARA.

THE general use of curara in our physiological laboratories as a convenient instrument for experiments upon animals is attracting a good deal of attention, and much severe comment from the opponents of animal experimentation. It is believed to be an agent which destroys all power of movement, while it leaves the capacity for sensation and for pain unaffected. Such is the belief of physiologists at the present time, and it must be confessed that it is in that belief that they employ it, if not as frequently as is asserted, at any rate often enough.

The alleged sensitiveness of animals poisoned by curara does not seem to us, however, to rest upon a very firm foundation. When frogs are under the influence of a moderate dose, if one limb be, by interference with the blood-supply to it, withdrawn from the influence of the curara, movements occur in the limb when the skin of that limb or of the body is pinched; hence it is concluded that the sensory nerves are unaffected. But so does a frog whose head is removed. The movements must be entirely reflex. Moreover, the property of excitability of the sensory nerves is lost when the dose of curara is increased. It is only reasonable to suppose that the effect which curara in a large dose produces in a moderate degree, it produces to some extent in a smaller dose, and that the sensory perceptions of the animal are lessened to some extent by a dose which is sufficient to destroy the irritability of the motor nerves. It must not be forgotten that central sensibility is a very different thing from excitability of sensory nerves, just as voluntary power is a very different thing from excitability of motor nerves. A poison will paralyse the will which has not the power to destroy the irritability of the motor nerves, and it is not unreasonable to believe that the sensory centres of the animal are dulled, even though its sensory nerves remain irritable. Until this is very conclusively ascertained, the use of curara, while it may be discountenanced, should not be deprecated as the atrocious agent it is alleged to be.

A SMALL MATTER OF MOMENT.

IT is not a pleasant thing to meet one of those covered litters, something between an elongated trunk and a coffin, in which sick paupers are removed from their beds at home to the workhouse; but there is at least a show of carefulness in the proceeding which almost reconciles the spectator to the clumsy performance of a good action. Nevertheless, why cannot parochial officials be induced to add to their grace the virtue of a trifling precaution? If only they would select able-bodied and well-conducted paupers as bearers, in place of weak, decrepit, or reckless beings, who inflict unnecessary suffering on their burden, there would be no additional outlay, and there would be a considerable gain in comfort to the sick and in public approval. Again, the bearers should keep step. This is a very small matter, but it is one of great moment to the person carried. Now that the old distich about jolting the dead bones of a pauper over the stones, because they happened to belong to a person whom nobody owns, is grown obsolete, it would be no sentimental excess of care to avoid subjecting the sick or the dying to a process not unlike churning, and quite as uncomfortable. Nothing more is requisite than to appoint strong and careful bearers, and teach them to step together like the bearers of a military ambulance.

THE LONDON HOSPITAL.

WE learn that on Tuesday last, the House Committee of the London Hospital decided to postpone for three months any election to the post of assistant obstetric physician, though a vacancy had been declared and applications received. The rules of the hospital require every eligible candidate to be a member of the Royal College of Physicians, and some of the candidates had this qualification whilst others had not, and the committee, it would seem, after consideration, decided it would be best in the interests of the hospital to defer the election. We believe that in this departure from usual custom the committee were supported by the opinion of many members of the staff, who were naturally anxious to encourage one of the candidates who had not the legal qualification necessary, but who had distinguished himself greatly whilst a student, not only by taking prizes, but by clinical work, and had, moreover, shown by general conduct that he would most probably prove a desirable colleague. As this decision allows more than one junior candidate the opportunity to legally qualify for the appointment, the committee have probably acted wisely. It is to the interest of large institutions that junior staff appointments should be filled by men who can give a great deal of time to clinical work, for the benefit of both the patients and the students.

MEDICAL LEGISLATION IN NEW SOUTH WALES.

IT is proposed to introduce a new Medical Bill for New South Wales. Dr. Smith, the Dean of the Faculty of Medicine in Sydney University, has given great offence in arguing for this Bill by asserting that there is such an amount of ignorance, unskilfulness, and intemperance among legally-qualified men that human lives are daily endangered by them. We can readily believe that these words are a misrepresentation of the state of medical education and character in the colony; but we must dissent from

some of the arguments against Dr. Smith used by the *Melbourne Medical Record*, which says, "Why should Dr. Smith gird at the profession because some of them can't spell?—as if knowing how to spell made a doctor. Medicine owes more to quackery than members of the profession either know or would like to admit. The Pharmacopœia is nearly made up of quack nostrums." This is strange doctrine for a medical journal, "the only weekly medical journal in the Australian colonies." The sooner there is another, we should say, the better.

THE NORWOOD POISONER.

FIVE years may seem a long term of punishment for a man going about drunk, and with nothing but the recklessness of a drunken man dispensing poisonous doses of strychnine to everybody that was drunk enough to accept his hospitalities; but we are disposed to think it is not much too long. It is high time that the principle was more fully enforced, that if men will get drunk and be reckless, they must not count too much on the fact of their being drunk as an excuse for their being reckless. One life was sacrificed, and it is a mere accident that two or three more were not compromised by this drunken freak of Walter Thompson Hunt. The incidents of the case are a painful illustration of the day's work of a man who has the curious complicated generosity of a drunken man—first to make everybody drunk he meets with, and then to administer something to undo the drunkenness. We entirely acquit Hunt of malice. No doubt strychnia had been found by him to act as a sort of pick-me-up, and it is known to be a useful tonic for inebriates. But after making all allowances, we are not sorry that he will have five years to reflect on the value of human life and the criminality of recklessness. It is lamentable to note that not one word of information transpired at the trial as to the source from which the prisoner obtained the strychnia.

HOSPITAL SUNDAY.

EXPECTANT hospitals and dispensaries probably feel rather acutely the delay in the distribution of the Hospital Sunday Fund. It is certainly rather tantalising. But there is reason to hope that the delay will secure a better distribution, and obviate much of the dissatisfaction and adverse criticism which it is so desirable to avoid with a view to the satisfaction of all parties. It was resolved in the course of the warm but valuable discussions of the spring that in no case should the grant to an institution be reduced or withheld until after a conference with the managing committee of the institution. We are informed that seven deputations are to be conferred with on the 7th of October, and half-a-dozen more as soon as the committee can arrange to receive them. Further, it was resolved in May that before finally distributing the fund, the Committee of Distribution should present their report to the Council. After the conferences with institutions, then, the Council will have to meet and sanction the report. All this anxiety to secure a good distribution is justifiable, and we may confidently believe that the Distribution Committee, having now got the holidays over, will use as much haste as is consistent with good work.

OF BAD PROMISE.

THERE used to be a provincial proverb to the effect that the shoemaker's children were generally badly shod. Is it because the Government is entirely engrossed with the prosecution of sanitary reforms in the country that it so strangely neglects the surroundings of its own *employés*? The condition of many of the public offices is little short of a scandal to the authorities. Attention is afresh directed to the matter by the statement that Brigadier-General Campbell, C.B., is absent from the War Office on leave, "the atmosphere of the place" having affected his health. Not many weeks ago a public servant fell a sacrifice to the defect of ventilation in the British Museum. The new buildings in Parliament-street were for some time unoccupied because the escape of sewer gas into the apartments was unbearable. The War-office has long been notoriously ill-ventilated. It is time to protest against this very serious, and we must add disgraceful, state of things. A Government which prides itself upon being especially solicitous for the health of the people should show its care for the public welfare by showing some regard for the health of public officials. We cannot but feel that the present grievous neglect of internal affairs is of bad promise for the general work, and it is impossible not to experience concern and misgiving.

THE LATE DR. HUGHES BENNETT.

WE regret to have to announce the death of Dr. John Hughes Bennett, F.R.S.E., late Professor of the Institutes of Medicine at the University of Edinburgh. The subject of our memoir was born on the 31st August, 1812, and in 1829 was articled to a surgeon in Maidstone. Soon after he proceeded to Edinburgh, where, in 1837, he graduated with the highest honours as M.D. Dr. Bennett afterwards proceeded to Paris, where he studied for two years. He then left for some of the German schools, where he remained until 1841. Returning to Edinburgh stored with varied knowledge and experience, he soon acquired an influential position, obtaining, among other advantages, the post of lecturer on histology and the use of the microscope. In 1843 he was appointed pathologist to the Royal Infirmary, and five years after, on the resignation of Dr. Allen Thomson, he was nominated to the chair of the Institutes of Medicine in the University, a post which he held most worthily up to quite a recent date. Dr. Hughes Bennett furnished numerous and valuable contributions to medical literature, the most important of which is his book on Clinical Medicine. We hope next week to give our readers a further account of his life and good deeds.

THE LICENSING LAWS IN LIVERPOOL.

WE are glad to learn that the Liverpool police for the last two or three weeks have been most active in laying information against publicans who supply drink to drunken customers. The great disproportion between the number of convictions for drunkenness and the convictions of publicans for supplying drink is a disgrace to the police. The radical evil, however, in Liverpool, as elsewhere, is in the fact that the number of public-houses is out of all proportion to the wants of the public. Half of them could not be kept up if people only took what, on even a generous computation, they required. For this state of matters, so palpable in London, not the police, but the magistrates are to blame. The sooner some greater stringency is introduced into the system by which licences are granted and continued the better.

HEPATICO-BRONCHIAL FISTULÆ.

A CASE of fistulous communication between the liver and the right lung was recently described to the Société Médicale des Hôpitaux by M. Laboulène. Such a condition is in itself of great rarity, and the instance was further remarkable in the obscurity of the condition in which it arose. The common cause of fistulous openings between the liver-ducts and adjacent viscera is the rupture of either an abscess or an hydatid cyst of the liver, but in this case there was nothing to indicate the presence of either of these

conditions. The patient was a man aged forty-six, of intemperate habits. For six months there was constant expectoration of bile, which had commenced suddenly without preceding illness or indication of liver trouble, but after the ingestion of a large quantity of beer. There appeared to have been no vomiting, no expectoration of pus or membrane or clear liquid. Examination six months after the commencement of the bilious expectoration showed slight enlargement of the liver, and some dulness at the base of the right lung, where loud râles could be heard. When he coughed some bile was expectorated, and the râles disappeared. With rest, regulation of diet and bowels, &c., the expectoration lessened, and in a few weeks disappeared, and the patient left the hospital well.

DR. HENRY BENNET.

THE month of October, which brings back the busily engaged members of our profession, renovated, we must hope, by their hard-earned holiday, will see the departure of one of our best-known London physicians from the arena of consulting practice. Dr. Henry Bennet, after thirty-three years' practice as a consulting physician, retires from London professionally. In 1849 Dr. Bennet's career was arrested by all but fatal illness, and he was obliged to surrender active work, and to retreat for the winter to the south of Europe. Here his energy did not abandon him. His works on the climate of the Mediterranean and on thoracic pathology are well-known books of reference.

THE FEMALE MEDICAL STUDENT QUESTION.

A CONFERENCE of the medical staffs of the General and Queen's Hospitals, and of the professors and tutors of Queen's College, Birmingham, was held on the 29th ult., on the question of the admission of women to a medical education, when it was decided by a majority of thirteen to nine, "That the professors and tutors of Queen's College, and the physicians and surgeons of the General and Queen's Hospitals, are not prepared to undertake the medical and surgical education of women." Under these circumstances the Council of Queen's College will have no alternative but to decline to receive female medical students.

WORCESTER INFIRMARY.

AT a meeting of the Worcestershire Medical Society, held Sept. 29th, 1875, it was resolved unanimously:—"This meeting has learned with much regret the differences which exist between the honorary medical staff and the Executive Committee of the Worcester Infirmary. Having confidence in the moderation of their professional brethren connected with it, this meeting assures them of their sympathy and approval in their attempt to obtain for themselves and their successors such protection by the rules as may be needful to secure them from unnecessary vexations in the responsible yet privileged position of honorary medical officers of that institution."

MEETINGS OF THE MEDICAL SOCIETIES.

WITH the opening of the medical session the time arrives for the renewed meetings of the various medical societies of the metropolis. The first society to commence proceedings is the Obstetrical, which meets on Wednesday next, the 6th inst. This is followed by the Clinical, on Friday, the 8th, and the Medico-Chirurgical on Tuesday, the 12th. The Pathological Society is the last in the field, its first meeting being appointed for Tuesday, the 19th. All these societies meet at half-past eight o'clock, with the exception of the Obstetrical, which begins at eight.

MR. JOHN SPEAR, medical officer of health, in presenting a report to the Jarrow Urban Sanitary Authority, describes an outbreak of enteric fever which made its appearance in the district in August last. In a few days thirty-four cases were reported, occurring in twenty different families. Of these more than half were of children. There was no difficulty in proving that the disease was caused by contaminated milk. Nearly all the sufferers had obtained their supply from the same farm. When the farm was visited six of the occupier's family, including himself, were down with typhoid. The water used in the dairy was derived from a well situated about eighteen yards from a privy and cesspit, the latter simply a hole dug in the ground, and in no way protected. Examination made it quite clear that soakage had been going on for a long time. The whole arrangements of the place were of a disgusting kind. There was direct communication between the dairy and a room in which some of the fever patients were lying, and the clothes of these patients were washed in the dairy.

THE late medical officer of health for Paddington, in issuing his last report on the condition of the district, animadverts on that long-standing nuisance, the Paddington Canal. Every attempt made to abate the evils connected with the foul and stagnant water of the basin had failed. House-dust, garbage, street sweepings amounting to hundreds of tons, and the manure of thousands of horses, were daily loaded into the barges in the canal. Analyses of the water made in July, August, and September showed it to be little better than sewage. It is surprising that the health of the inhabitants near the canal is so good, but sooner or later we fear epidemic disease will make its appearance.

WE are glad to hear that the Newcastle-on-Tyne Dispensary has been particularly fortunate within the last year as to its finances, a sum of over £12,000 having been added to its resources by legacies, including the munificent bequest of £10,000 left by the late Wm. John Hutchinson, Esq., of Newcastle. Various improvements are suggested in the working of the institution; not the least is that of Dr. Lyle, one of the honorary staff, who mentions the difficulty experienced by poor patients of the dispensary in obtaining instruments and surgical appliances.

THE Committee of Management of the Evelina Hospital for Sick Children appeal for increased support to enable them to receive forty-four additional patients. The committee would be glad to see a greater number of visitors to the hospital, and feel sure that a large amount of sympathy would be awakened by witnessing the sufferings and helplessness of the little patients, and the skilful and tender treatment they receive. One ward of the Evelina Hospital is expressly appropriated to cases of whooping-cough, and another is entirely set apart for Jewish children.

IN London 1319 deaths were registered last week, including 13 from measles, 90 from scarlet fever, 12 from diphtheria, 49 from whooping-cough, 18 from different forms of fever, and 125 from diarrhœa. No death from small-pox was recorded. In the large public institutions 200 deaths were reported, or 15 per cent. of the total mortality. The Fever Hospital at Homerton contained 281 patients on the 25th ult., 211 being under treatment for scarlet fever.

DR. DIVER, of Southsea, has received an official letter from the Humane Society of Boulogne, in which his services in crossing the Channel with Captain Boyton during his two trips are set forth in very complimentary terms.

WE understand that the Chertsey health authority have requested Mr. Birch, C.E., to make a survey of Bagshot, and prepare a report of its sanitary condition. It will be remembered that the district was visited by our Sanitary Commission some few months ago, when, although its very great natural advantages were described at length, the sanitary defects existing in the town itself were fully pointed out.

DURING the past month no less than five ships have arrived in the Thames with cases of scurvy on board, and seven or eight of the victims have been admitted into the Seamen's Hospital. The medical inspector of the Board of Trade has, by direction of the Marine Department, held official inquiries in three of these cases, but the result has not yet been published.

WE hear that cholera has broken out in the European camp at Delhi. It is, however, of a mild type, and it is confidently hoped that it will have disappeared long before the assembling of the troops forming a large part of our Indian army who are to meet the Prince of Wales outside the walls of the historic city.

IN the *Athenæum* for September 18th will be found an interesting article by Mr. Thoms on the Tring centenarian. Mr. Thoms strives to demolish the evidence offered by Sir Duncan Gibb in our columns towards establishing the great age of Elizabeth Leathurlund.

A YOUNG gentleman has been prosecuted by the Colemine Board of Guardians for exposing himself while convalescent from scarlatina. The Board deserves much credit for applying the law in this case.

IT is stated that the sanitary advisers of the Government of India have recommended that Simla be abandoned for three years on account of its unhealthiness.

WE are requested by Mr. Cripps, of Cirencester, to say that it was the Weymouth Sanitarium to which he alluded in his letter published in our columns last week.

FOOT-AND-MOUTH DISEASE.

THE reports relative to the foot-and-mouth disease show that it has abated nothing of its virulence, and that it is widely prevalent in England and Scotland, causing great inconvenience and immense loss, and in many districts leading to the suppression of cattle-shows. It is not likely that it will be much diminished in prevalence for some time to come, and if we could arrive at anything like a correct estimate of the loss it has caused this year, we should probably find that it amounted to more than a million at the very least.

In our previous article on the subject, we alluded to the principal causes which are in operation in extending this purely contagious malady, and we pointed out that the system of inspection—if such a designation can be applied where there is no system—is of very little value, inasmuch as the principal sanitary inspectors are the police—men no doubt worthy of reliance in their own special sphere, but neither by their knowledge nor training fit to be entrusted with the control or suppression of contagious diseases, either human or animal. The Annual Report of the Veterinary Department of the Privy Council for 1874 fully corroborates our statement in this particular, as we are informed that on the 31st December last there were 1706 inspectors holding appointments under the local authorities, and of these 371 only were veterinary surgeons (it is not mentioned whether they were all qualified), 1021 were officers of police, and "314 appeared to have possessed no special qualification for the office." Without inquiring whether the police officers themselves possessed any special qualification, we may point out that less than one-fourth of the total number of inspectors were veterinary surgeons; and when we know that these are generally only called in now and again to verify the existence of certain contagious diseases, and have, as a rule, nothing to do with tracing the history of these, nor advising as to their suppression, we need not be surprised that this malady in particular is just as active, and as free to spread, as if we had no Veterinary Department and no inspectors.

It appears to be imagined that anyone can perform the duties of an inspector, and that, as the police are already in pay, and their duties are not particularly heavy, they might as well have this work thrown on them. We need scarcely say that a greater mistake could not be made. It requires well-trained and thoroughly competent veterinarians to perform the functions of an inspector efficiently; for not only have these subtle maladies to be thoroughly stamped out wherever and whenever they appear, but their invasion or re-introduction has to be guarded against, and their mode of access closely watched. Indeed, from what we know of these contagious diseases, and from what we see of the trade in animals and the manner in which it is conducted, we are convinced that nothing beneficial can be done until veterinary surgeons—and the very best of them—are appointed to take charge of districts at a liberal salary, with the view of protecting the public from the ravages of these scourges. The attempts now made in this direction would be amusing were the results not so painfully serious. The Veterinary Department of the Privy Council must be roused up from its supineness and apathy, and made to see that its existence depends on its usefulness. Hitherto it has been of very little service to the country; it leaves everything to the local authorities, and the majority of these either know or care little about the matter, or try to get the work of inspection done for next to nothing.

In the meantime, as the reforms which are so urgently required are not likely to be instituted until more millions of pounds are lost, it may be useful to indicate what should be done in the way of prevention or cure by those whose stock is menaced or already invaded by this "foot-and-mouth" complaint. These indications we will summarise from Mr. Fleming's "Manual of Veterinary Sanitary Science and Police."

Newly-purchased animals, and especially those which have been exposed at fairs or markets, or travelled by boat or rail, should be quarantined in some convenient place apart from other stock, and no communication should take place between them for at least six days. Forage from infected districts should be interdicted, unless it is proved that it cannot possibly be tainted; and no persons or articles from infected stables or pastures should be allowed to go near healthy animals.

As a rule, few animal diseases are more amenable to treatment, and still fewer exemplify the beneficial effects of hygienic measures, than this. When it has appeared, the sick animals, if at pasture, should be housed and allowed to stand on some soft material, such as sawdust. If they cannot be sheltered, then they ought to be put on firm grass land. Soft succulent food, mashes and nourishing gruel, must be the diet while the mouth is sore, and bran gruel, or water slightly acidulated, given to drink. If the fever runs high or constipation is present, treacle, Epsom salts, or common salt may be gently administered. Laving the mouth in cold water (which may be slightly acidulated) is grateful when

the eruption is slight, but when the erosions are extensive and painful, gargles of vinegar-and-water, hydrochloric acid, honey-and-water, or a weak solution of tannic or gallic acid (one ounce to the gallon) are necessary. Lime-water is a good dressing when the ulcers are deep. When the feet are affected, and even before they are involved, they may be dressed with carbolised glycerine, a weak solution of carbolic acid, or any mild astringent. It is frequently very beneficial to send the animals into a shallow running stream to bathe their feet; but when these are affected, it is better, as a rule, to allow the animals to rest as much as possible. When suppuration occurs beneath the hoof, or the feet are severely involved, it is advisable to procure the services of a veterinary surgeon.

Great cleanliness and thorough disinfection must be advocated, both during the prevalence of the disease and after it has disappeared. In many farms and cowsheds the active germs of the malady are allowed to remain, and cause repeated outbreaks.

But, we repeat, the therapeutical treatment of the disease is altogether a secondary affair; its prevention and absolute extinction are what we must insist upon; and the matter is now assuming such a grave aspect, both in a pecuniary and sanitary point of view, that we feel convinced that nothing less than an efficient organisation to effect this object, and to stamp out other serious animal contagions, will now satisfy the public. The present temporising policy with regard to these destructive pestilences has been tried for now nearly ten years, and has proved notoriously useless. It is high time a common-sense view was taken of the matter, and measures adopted which would relieve us from these heavy annual losses and panics.

THE MEDICAL HISTORY OF THE DUTCH WAR AGAINST ATCHEEN IN 1873.

(*Concluded from page 453.*)

Sanitary Experiences of the Expedition.

THE surgeon-in-chief strongly recommends that in future on shipboard the Europeans should be supplied with thin mattresses and pillows, and the natives with mats.

The first night on shore found the troops without any protection, there being no time for extemporising huts or tents, besides which an immediate change of camp was foreseen to be unavoidable from the proximity of a graveyard to the superficially lying ground-water of the locality.

In the new camp all kinds of skeleton huts were erected as a defence against the heat, which was distressing more from its uniformity than its actual intensity. No unfavourable influence was noted in the camp of the field column. The waterproof sheets of the officers were very useful to protect both from rain and from the ground-damp of the rice-fields.

The troops while on board the steamers were excellently fed, according to the contract with the Netherlands and Ostend Steamship Company.

From the first day of landing fresh meat was served out, and it was agreed between the authorities and the surgeon-in-chief that live stock should be provided, so that once a week recently killed meat should be substituted for the Australian beef. It would be a most advisable thing that, in the rationing of troops, the salted and smoked flesh, as bacon, &c., should be entirely replaced by Australian meat.

The best drink for troops on the march was found to be cold tea; the dangerous properties of strange water are destroyed by boiling, and the objectionable taste of boiled water corrected by tea.

On the return voyage, water brought from Padang by one of the invalid ships sent thither was for the most part used. At the same time, on all ships it was ordered that only cold tea should be drunk, and the very rare occurrence of diarrhœa speaks for the judiciousness of this rule. Alum as a means of clearing water was rejected, purification by sesquichloride of iron and bicarbonate of soda being substituted.

In clothing and equipment there is much room for improvement. The use of sun-covers to the ordinary head-dress is much to be condemned, since the back piece hanging down obstructs the air and heats the back of the neck, besides which, from being too broad and too long, they enclose the ears, and the words of command are not heard. For this reason many of the men put up the back pieces. For service such as this wicker helmets should invariably be procured. The haversack was also a great hindrance, since by swinging to and fro it impeded the man's progress; and it is only fair that when engaged against an unencumbered enemy, as here, the men should be relieved of all impediments, carrying only their weapons and ammunition, and a rolled coverlet capable of containing a change of linen.

Esmarch's triangular bandage was served out as part of the kit of each man, but its application by the men was not necessary, as surgical assistance did not fail; this, however, does not lessen the value of the appliance.

The Care of the Wounded.

As a rule the wounded were attended immediately after the fight. Only on the 16th April, when 117 were wounded, was there any delay, and even then the severely injured were in camp by midday. Fresh meat, vegetables, milk, seltzer water, &c., were liberally supplied for their use.

The splints of split bamboo were in many cases of complicated wounds of much service, but especially was the quantity of pasteboard valuable for hurried bandages. The plaster-of-Paris bandage could not be made to set either at the seashore ambulances or on board the hospital ship, a defect which must have been caused by the excess of atmospheric moisture, since the same material hardened perfectly when used on returning to Batavia.

The tandus, as stretchers, were superior to all others; the wounded did not roll in them as on the broader ones, and two coolies were sufficient to carry them, besides which water could be brought in the hollow bamboo. The objection of their not affording an even surface for fractures of the lower extremity can be guarded against by the previous application of splints, and it is maintained that even unset fractures can be conveyed in them. If broken they can easily be replaced, and may be extemporised from mats or waterproof sheets.

The hospital coolies ought always to be marked with a distinctive badge, as otherwise in the confusion of an engagement they mingle with the other coolies and disappear.

The European hospital *personnelle* won by their courage and endurance unanimous commendation; but for a big war special sanitary companies are indispensable.

The principle of taking invalided men, unfit for active service in the ranks, is in the highest degree reprehensible.

The judgment pronounced on the service rendered by the coolies proves it to be necessary that for the hospital service there should be *well-disciplined soldiers*, since only a hospital corps trained and schooled as other bodies of soldiers can perform the required duties. The opinions of military surgeons in all armies agree on this question, and it is to be hoped that this universal accord will in time overcome existing prejudices.

In the Ambulance.

By the timely evacuations of sick and wounded to Batavia, overcrowding of the ambulance on shore was prevented. It was capable of accommodating 100 patients, and only for three days, from the 16th to 19th April, were all the beds occupied. 97 sick in all were treated in the ambulance, not counting those detained only for one or two days before removal to the hospital-ship.

On the Hospital-ship.

During the short time from the 22nd March to the 10th May 403 patients were treated; of these 152 were cases of severe wounds. As a protection for sick a ship is, above all, the most undesirable, since only by the constant use of windsails, by forming side-wall openings, and by turning the ship square to the wind, could anything like adequate ventilation be secured. An additional evil was that the ship carried cargo as well as hospital equipment; planks and bamboos were stowed away in the damp hold,

which on being taken out caused a most disagreeable stench. Worse still, dried fish for the native sailors was packed under the wards, and only discovered by the surgeon-in-chief perceiving the smell when making an inspection.

The number of sick made sanitary efforts most pressingly necessary. With this view the boards of the sick decks were daily well swept, cleaned, and sprinkled with carbolic acid and water, half a bottle of the red acid to a bucket of water; while day and night the vapour of carbolic acid was continuously produced by the following means: sand impregnated with carbolic acid dissolved in alcohol, in the proportion of eight ounces to ten pounds of sand, was sprinkled over the floor, and from this a constant exhalation of carbolic acid took place. All soiled dressings and excreta were at once disinfected and disposed of, and every attention paid to cleaning the clothes of the wounded.

For the disposal of the dead from the hospital-ship the body was wound round with 25 lb. of old iron chain, enclosed in canvas, and dropped into the sea. This was preferred to shot, as the latter sank to the bottom of the bag, which, by friction against the coral reefs, was quickly cut through; the shot then fell out, and the body floated. As it was no corpse ever came to the surface by Atcheen.

Return of Sick and Wounded.

Sick: 542 (proportion to strength, 15·8 per cent.); of these 27 died, being about 5 per cent.—*Wounded:* 50 killed (proportion to strength, 1·4 per cent.); 421 wounded (proportion to strength, 12·8 per cent.) Of their wounds 33 died, being less than 8 per cent.

The relative frequency of sword wounds to shot wounds was as 15 per cent. to 81 per cent.

The 421 wounded received in all 487 wounds, which, as regards the part of the body injured, were as follows:—

	Per cent.	Actual number.
Head wounded	12·7	62
Face	9·6	47
Throat and neck	2·6	13
Breast and back	7·8	38
Abdomen and loins ...	2·8	14
Pelvis	3·6	18
Upper extremity	34·4	168
Lower extremity	25·9	127
Of sickness superadded to wounds 6 died.		487

On the whole the treatment of the wounded was most successful, since, out of 421, only 33 (7·8 per cent.) died. Of those which proved fatal, 7 were breast wounds, 5 head, 1 abdomen, 3 knee, all of which were penetrating.

The most remarkable fact connected with this expedition was the total absence of typhus fever and pyæmia from their hospitals up to the time of their return to Batavia. "Notwithstanding the overcrowding of the hospital-ship with severely wounded, some of whom suppurated profusely, neither at Atcheen nor up to the re-arrival in Batavia had anyone died of pyæmia." The reasons for this exemption were recognised by the surgeon-in-chief in the care for ventilation, the scrupulous cleanliness of the places for the wounded on the decks, the plentiful supply of food, and the attention paid to dressings, which were changed many times a day when required. Also the three several evacuations of the wounded contributed to the happy result.

The operations performed were in all eleven:—*Disarticulations:* 1 left arm (died of exhaustion after healing of the wound; was an opium-eater); 1 right arm; 2 fingers.—*Amputations:* 2 left arm and 2 right arm (2 died); 2 right thigh (1 died of pyæmia in hospital at Batavia, 1 died of secondary hæmorrhage); 1 forearm.

By deducting the three cases which ended fatally under special circumstances a successful operative result is claimed, but the paucity of operations would testify rather to the fortunate issue of conservative treatment.

The Atchinese used their tulwars with great effect; in many cases the skull was cut through and the brain exposed. In one instance four fingers were cut off, in another a hand, and in a third both bones of the leg were severed without splintering, at one blow. The projectiles of the Atchinese were chiefly leaden, with a piece of porcelain or coral inside.

The best evidence of the sanitary success of this expedition is afforded by the detail of inward illnesses, of which only 187 cases were admitted during the whole campaign, and but five of these died. Fevers, however, increased to a considerable extent during the return voyage to Batavia, yet were for the most part of a mild type. Diarrhœa and dysentery, which have ever previously been the certain accompaniments of such undertakings, were almost entirely absent, and the few cases that did occur were especially amenable to treatment.

Correspondence.

"Audi alteram partem."

MEDICAL EXPERTS IN THE DAILY PRESS.

To the Editor of THE LANCET.

SIR,—THE LANCET has so consistently condemned the practice of medical men rushing into the daily press, that I venture to ask your attention to an instance which appeared in *The Times* of yesterday under the sensational heading "Homicidal Lunacy":—"I have received," writes Dr. L. S. F. Winslow, "through the courtesy of one of the leading lunacy authorities in Scotland, formerly a Commissioner in Lunacy, full details of 'the Cambuslang murder' to express an opinion on, and I trust you will allow me to do so in *The Times*."

It is apparent that my old friend, Dr. W. A. F. Browne, is here indicated. I cannot for an instant believe—as this extract would imply—that he ever thought of seeking the opinion of Dr. Winslow on a difficult psychological question; still less that he sanctioned this appeal to the public through *The Times*, on a matter of life or death at the moment under the consideration of the Home Secretary. As a writer in the *Pall Mall Gazette* the same evening remarked, this letter should have formed the subject of a private representation to Mr. Cross.

But what I wish now to notice is the rashness—excusable only on the plea of youthful inexperience—which has led Dr. Winslow thus to constitute himself the judge of a difficult medico-legal case, which he has neither seen nor examined. It is really too absurd. "Sancta simplicitas," says Mephistopheles, "bezeugt nur ohne viel zu wissen." "I do not see," writes Dr. Winslow, "how there can be two opinions in the case"—my own sentiment precisely with regard to the presumption which dictated this letter in *The Times*.

I am, Sir, your obedient servant,

London, September 25th, 1875. F. R. C. P.

To the Editor of THE LANCET.

SIR,—Dr. L. S. Forbes Winslow's letter to *The Times* of the 24th instant about the Cambuslang murder opens with a statement which is—doubtless unintentionally—misleading, and which I should be glad to have an opportunity of correcting. He says that "the full details" of that murder have been received by him through "the courtesy of one of the leading lunacy authorities in Scotland, formerly a Commissioner in Lunacy, *to express an opinion* on." As my father, Dr. W. A. F. Browne, is the only ex-Commissioner in Lunacy in Scotland, it must be he to whom Dr. Forbes Winslow refers. I am in a position to state that he sent to Dr. Forbes Winslow a newspaper containing the report of the trial, but that he did not request any judgment thereon. He ventured to form his own opinion of the case without any extraneous assistance.

I am, Sir, your obedient servant,

West Riding Asylum, Wakefield, Sept. 29th, 1875. J. CRICHTON BROWNE.

ALBINOS.

To the Editor of THE LANCET.

SIR,—A remarkable case of the existence of four albinos in one family has recently fallen under my observation, which, with your permission, I should like to place upon record.

They are all children, of the ages of twelve, nine, four, and two respectively, three of them being of the male sex,

and are typical specimens of their class; one description, therefore, will serve for all—viz.: The eyes present the well-known waving or restless condition of the muscles of the orbit, but are not so intolerant of light as in most cases. The pupils are of average diameter, and of a deep pink colour of great purity. The hair is of the softest texture, like the finest floss silk, and of the most exquisitely white and silvery colour, being luxuriant in its growth. The children, so far from exhibiting any of the mental deficiency noticed by some observers, appear to possess more than ordinary intelligence, and are well developed.

The parents are each thirty-seven years of age, and belong to the agricultural labourers; they are dark, swarthy people, and can offer no suggestion as to the cause of their children's peculiarity, there being no family history of the like on either side.

Other children not albinos have been born to them, and it is curious to note the order of succession. Thus, the first child was dark; second, albino; third, dark; fourth, albino; fifth, dark; sixth, dark; seventh, albino; eighth, albino; ninth, dark.

If any of your scientific readers would like to see them, they can be found at No. 96, Whitechapel-road.

I am, Sir, yours truly,

W. SEDGWICK SAUNDERS.

Queen-street, Cheapside, E.C., Sept. 29th, 1875.

AN AID TO THE OPERATION FOR STRANGULATED HERNIA.

To the Editor of THE LANCET.

SIR,—Probably most surgeons who are familiar with the operation for the relief of strangulated hernia, in private practice, at night, have felt the want of skilled assistance in addition to that afforded by the practitioner whom they meet in consultation. This gentleman is fully occupied in the administration of an anæsthetic, whilst some friend of the patient is able at most to hold a candle. This need of additional help has been very frequently experienced by myself, and was also observed by Mr. Francis Toulmin, of Clapton, whom I met in consultation on the 19th ult. In discussing the subject we agreed that some kind of speculum, to hold apart the edges of the wound, would much avail. I have taken the most simple—*i.e.*, the common eye speculum—as a pattern. This has been made for me, of stouter wire and of twice the ordinary size, by Messrs. Kröhne and Sesemann. I think some such device as this will prove very useful to the operator.

I am, Sir, your obedient servant,

C. F. MAUNDER,

Queen Anne-street, W., Sept. 21st. Surgeon to the London Hospital.

THE LATE DR. HUGHES BENNETT.

To the Editor of THE LANCET.

SIR,—The lamented death of this distinguished physician induces me to remind his numerous old pupils that a bust of him was presented in August last to the University of Edinburgh.

The committee are anxious to present a replica to the new infirmary at its opening, and for this purpose a sum of £60 or £70 is still needed. Subscriptions will be gladly received by Dr. A. P. Stewart, 75, Grosvenor-street; Dr. Andrew Clark, 16, Cavendish-square; Dr. McKendrick, of Edinburgh, or by myself. I am, &c.,

Great Charles-street, Birmingham. LAWSON TAIT.

WINCHESTER SCHOOL.

To the Editor of THE LANCET.

SIR,—I beg permission to correct some inaccuracies in that part of your Commissioner's report which refers to the dormitories and meals of the Winchester scholars. In addition to the old dormitories there are four modern ones, similar to those in the Master's boarding-houses for commoners. Only thirty-two scholars sleep in the old dormitories, some of which are no longer used as sleeping apartments. All the bedsteads are iron, the boys drink out of tumblers and eat off plates; they have, in addition, wooden trenchers for their bread. I have known Winchester forty-five years, and never even heard of a boy drinking out of a "black-jack." I believe that specimens of "jacks" and trenchers are exhibited to visitors, hence, I presume, the error of your Commissioner.

I am, Sir, yours faithfully,

GODFREY B. LEE.

New College, Oxford, September 26th, 1875.

IRELAND.

(From our own Correspondent.)

THE births registered in Dublin for the week ending 11th September amounted to 140, and the deaths to 144. The average numbers in the corresponding week of the previous ten years were—births 160, and deaths 155. The mortality from diarrhœa was 19; all of the fatal cases, except one, occurred in children. But two fatal cases of small-pox were registered in Dublin since 20th March last; none since 22nd May.

A good deal of objection continues to be urged in different quarters, for various reasons, against continuing to use the so-called "Dean Swift's Cabbage Garden" for interments. W. R. W. writes to the morning journals pointing out the error of calling the place in question "by the name it derived from the class of resurrectionists of former days." He states the proper name for this very ancient ecclesiastical enclosure was *Jardin des Capuchines*—the Garden of the Capuchins,—where a community of that order had an establishment. Dean Swift had no cabbage garden there, but owned an orchard, which has been alluded to in his writings, and which existed to the rear of the present Meath Hospital, in part of the locality formerly occupied by Keeffe's Nursery. Many of the tombstones appear of considerable antiquity, the inscriptions being quite effaced by age. The date on one was 1685. Adjoining this graveyard, on the north, is a smaller one belonging to the descendants of the French Huguenots. There are at least two other small burial-grounds belonging to the same class in the south part of the city of Dublin. Intramural burial should be entirely forbidden; the presence of rather a severe form of autumnal diarrhœa ought to quicken a movement in this direction.

The Factory Acts Commissioners, Sir James Fergusson, Lord Frederick Cavendish, M.P., and the O'Conor Don, M.P., are at present sitting at the Shelbourne Hotel. Several witnesses made startling statements as to the existence in Dublin of the "sweating system." We have reason to believe that the pictures drawn by the witnesses are by no means over-coloured. It is to be hoped that the result of the labours of the Commissioners will tend to provide better workrooms for the many minor factories in Dublin, and that a system of compulsory education may be provided for the young. The state of the tenement houses and of the labouring classes generally in Dublin much needs improvement, without which physical and moral degradation can but progress.

A meeting of the Senate of the Queen's University was held at Dublin Castle on Wednesday, the 15th ult., at which the following examiners were appointed:—Benjamin G. M'Dowel, M.D., examiner in medicine; Anthony H. Corley, M.D., examiner in surgery; William Roe, M.D., examiner in midwifery; Charles F. Moore, M.D., examiner in materia medica; Matthias O'Keefe, M.A., M.D., examiner in medical jurisprudence.

Dublin, Tuesday, Sept. 21st, 1875.

DISEASED HORSES.—At the Lambeth Police-court lately a case was brought before the magistrate under the Contagious Diseases (Animals) Act. The landlord of a tavern in Brixton was summoned, at the instance of the Metropolitan Board of Works, for neglecting to give notice that he had in his possession a bay mare affected with glanders or farcy. It was proved that the animal never had been affected with either disease, and that the cause of its death was non-infectious fever. There was no other course left the bench than to dismiss the case.

Medical News.

APOTHECARIES' HALL. — The following gentlemen passed their examination in the Science and Practice of Medicine and received certificates to practise on Sept. 23rd :—

Jackson, Ernest Carr, Harley-street.
Scott, William Edward, Robert-street, Hampstead-road.

The following gentlemen passed the Primary Professional Examination on the same day :—

Dell, Joseph Francis, Guy's Hospital.
Harvey, Thomas Prickard, London Hospital.

At the Preliminary Examination in Arts held at the Hall on Sept. 24th and 25th 145 candidates presented themselves, of whom 32 were rejected, and the following 113 passed and received certificates of proficiency in General Education :—

FIRST CLASS (order of merit).—1. F. S. Pridden. 2. C. Ellaby. 3. A. V. Bernays, F. C. B. Butler, J. F. Easmon, S. de C. Elmslie, P. Garrard, C. J. Harper, W. L. Pruen, F. C. Selous, C. L. Stow, E. G. Williams, and G. J. Wilson.

SECOND CLASS (in alphabetical order). — C. D. Adam, J. B. Adams, R. A. Bazire, D. Bennett, E. J. Biden, R. A. Billiald, A. Bosanquet, H. Bourchier, J. L. Bousignac, P. Brown, C. G. Bunn, H. P. Butler, S. Butterworth, J. F. Caddy, J. A. Caldwell, G. H. Capes, H. W. Carr, W. J. Clarke, E. S. Cockell, W. S. C. Collins, C. A. R. A. Colmer, E. R. Cree, W. H. Crosse, H. W. T. Crow, B. H. Dale, E. Davies, J. D. Davies, W. J. S. Davis, P. H. Day, B. J. Dorrian, J. M. Douglas, J. B. Dresser, H. W. Edis, F. W. Elliott, E. Evans, E. Farmer, S. Farmer, W. A. Fenton, J. W. Field, H. E. B. Flanagan, C. L. Gill, G. T. Girdler, P. Hall, J. Hammond, E. Hazel, N. Hildyard, F. Hitch, W. Holt, A. R. Jacobs, F. Jones, G. M. Jones, R. B. Knowles, T. L. Laxton, P. R. le Cocq, A. Lee, J. J. Lewis, R. Lewis, J. P. Little, E. H. Locker, L. Mark, L. Matheson, G. McKee, E. J. Moberly, Peter Monti, H. Parsons, W. H. C. Payne, J. H. Powell, Z. Prentice, F. W. Prideaux, J. D. Priest, T. Rhodes, J. T. Richards, J. M. Rogers, C. Rowley, E. F. Shaw, W. E. Sicard, G. E. Skinner, A. Slate, W. Slater, S. Smyth, A. Sharland, W. C. Steele, W. H. Sturge, C. A. A. Taylor, A. B. Thorald, F. F. Thorne, A. W. Veuess, A. J. Verrall, J. E. Viney, J. Waldron, A. Ward, G. B. Waterhouse, F. S. Watson, J. G. Webb, W. S. Webb, J. Whitehouse, E. J. P. Wilson, O. Withers, and F. Woore.

THE Royal Aquarium and Summer and Winter Garden at Westminster is rapidly approaching completion. It will be opened to the public in December next. Last Tuesday a luncheon was given in the building to a large number of noblemen and gentlemen interested in the scheme. It will prove, we are sure, a great boon to London. The educational facilities of such an establishment are not to be lightly estimated.

THE PRIVY COUNCIL AND THE FOOT-AND-MOUTH DISEASE.—The Clerk of the Peace for the county of Warwick has received a communication from the Privy Council Office in reply to an expression of opinion by the local authority of Warwickshire to the effect that they ought to possess the power of stopping sales, fairs, and markets when they find the occasion, in their opinion, sufficiently urgent. Their lordships express their concern at the prevalence of foot-and-mouth disease, not only in Warwickshire, but in the country generally, but state that they are not prepared to put in force so extreme a measure as stoppage of sales and fairs on that account. In conclusion their lordships express an opinion that a severe application of the powers vested in local authorities will be found sufficient to reduce the disease to such proportions as will admit of ordinary legislative remedies to be obtained when the country is comparatively free from the disease.

Medical Appointments.

ALCOCK, J., M.R.C.S.E., has been appointed Medical Officer of Health for the Burslem Urban Sanitary District, vice Goddard, resigned: £50 per annum to commence with.

AUSTIN, Mr. T. F., has been appointed an additional Hon. Dental Surgeon to the Liverpool Dental Hospital.

BOURKE, G. J., L.R.C.S.I., L.M., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Shercock Dispensary District of the Ballieborough Union, Co. Cavan, vice Rooney, resigned, and appointed to the Kingscourt Dispensary District.

BOWER, D., L.F.P. & S. Glas., has been appointed Resident Medical Superintendent of Saughton Hall Asylum, near Edinburgh.

BROWN, P., M.D., has been appointed Medical Officer and Public Vaccinator for the Winlaton District of the Gateshead Union, vice Megget, resigned.

BROWNRIGG, T. H., L.R.C.P.Ed., L.R.C.S.Ed., L.M., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Moira Dispensary District of the Lurgan Union, Co. Armagh, vice Anderson, resigned.

CORLEY, A. H., M.D., has been appointed second Examiner in Surgery at the Queen's University in Ireland.

DAVIDSON, A. D., M.D., has been appointed Assistant Professor of Materia Medica at the University of Aberdeen.

DE DENNE, T. V., L.R.C.P.Ed., M.R.C.S.E., has been appointed Assistant Medical Superintendent of the Bristol Lunatic Asylum, Stapleton, vice Dickson, resigned.

DOUGALL, J., M.D., C.M., has been appointed President of the Glasgow Southern Medical Society for 1875-76.

DOUGLAS-LITHGOW, R. A., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Government Medical Inspector for the Port of Wisbeach.

DUNSTAN, R., M.R.C.S.E., has been appointed Medical Officer of Health for the St. Ives, Cornwall, Urban Sanitary District.

FULSHAW, R., M.R.C.S.E., has been appointed Certifying Factory Surgeon for Earl-Shilton, vice Spencer, deceased.

KNOX, T., L.R.C.S.I., L.K.Q.C.P.I., L.M., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Maguirebridge Dispensary District of the Lisnaskea Union, Co. Fermanagh, vice Johnston, resigned.

M'DOWEL, B. G., M.D., has been appointed second Examiner in Medicine at the Queen's University in Ireland.

M'KENDRICK, J. G., M.D., has been appointed an Examiner in Medicine at the University of Aberdeen for the ensuing year.

MOORE, C. F., M.D., has been appointed second Examiner in Materia Medica at the Queen's University in Ireland.

MOORE, J. B. G. G., L.R.C.P.L., has been appointed Medical Officer and Public Vaccinator for the No. 4, or Leigh District of the Martley Union, vice Taplin, resigned.

MORRIS, B. R., M.D., M.R.C.P.L., has been appointed Physician to the new Hospital for Women, Nottingham.

MOUTRAY, C. D., L.R.C.P.Ed., L.R.C.S.I., has been appointed Medical Officer and Public Vaccinator for the Ballyroan Dispensary District of the Abbeyleix Union, Queen's County, and Medical Attendant to the Royal Irish Constabulary, vice Walshe, resigned.

MURRAY, F. R., L.K.Q.C.P.I., L.R.C.S.I., has been appointed House-Surgeon to the Southport Infirmary, vice Potts, resigned.

NEWBY, T., M.D., M.R.C.S.E., has been reappointed Medical Officer of Health for the Great Grimsby Urban Sanitary District for one year.

O'CONNOR, Mr. T., has been appointed Apothecary to the Cavan Union Workhouse.

OGSTON, A., M.D., has been appointed an Examiner in Medicine at the University of Aberdeen for the ensuing year.

OGSTON, F., jun., M.D., has been appointed Assistant Professor of Medical Jurisprudence at the University of Aberdeen.

RILEY, J. St. P., M.R.C.S.E., L.M., has been appointed a Medical Officer to the new Branch of the Salford and Pendleton Royal Hospital and Dispensary, Manchester.

RODGER, J., M.B., C.M., has been appointed an Examiner in Medicine at the University of Aberdeen for the ensuing year.

ROE, W., M.D., has been appointed second Examiner in Midwifery &c. at the Queen's University in Ireland.

SMITH, P. D., M.B., has been appointed Assistant Professor of Chemistry at the University of Aberdeen.

SMITH, R., M.B., has been appointed Assistant Professor of Anatomy at the University of Aberdeen.

STEWART, Mr. C. T., has been appointed Stipendiary Assistant Dental Officer to the Liverpool Dental Hospital.

TINDAL, D., L.F.P. & S. Glas., has been appointed Vice-President of the Glasgow Southern Medical Society for 1875-76.

Births, Marriages, and Deaths.

BIRTHS.

CLOUSTON.—On the 25th ult., at Tipperlinn House, Morningside-place, Edinburgh, the wife of T. S. Clouston, M.D., F.R.C.P.Ed., Physician-Superintendent of the Royal Edinburgh Asylum, of a son.

EASBY.—At North Villa, Darlington, the wife of W. Easby, M.D., of a daughter.

FOX.—On the 19th ult., at Widford, near Chelmsford, Essex, the wife of Dr. Cornelius Fox, Medical Officer of Health for East, Central, and South Essex, of a daughter.

MEIKLE.—On the 21st ult., at Strathearn House, Crieff, the wife of Thos. H. Meikle, M.D., of a son.

ROYDS.—On the 24th ult., at Reading, the wife of Wm. Royds, L.R.C.P.I., of a daughter.

MARRIAGES.

LLOYD—MEADOWS.—On the 23rd ult., at Christ Church, Kingstown, John Lloyd, M.D., Surgeon Bengal Medical Service, to Mary Lloyd, daughter of Joseph Meadows, Esq.

SMITH—CRAMPTON.—On the 25th ult., at Christ Church, Highbury, Wm. J. Smith, M.B., to Louisa, younger daughter of Thomas Hill Crampton, Esq., of Highbury.—No Cards.

DEATHS.

BRAUND.—On the 21st ult., Marian, the dearly beloved wife of James Montague Braund, Esq., of Hill House, Stratton, North Devon, in her 40th year.

DERBYSHIRE.—On the 20th ult., at Stockport, Wm. Derbyshire, M.R.C.S.E., aged 61.

DICKINSON.—On the 27th ult., Joseph, the second son of the late W. F. D. Dickinson, M.R.C.S.E., of Fountain-street, Ulverston, aged 29.

EVANS.—On the 22nd ult., at Bristol, J. J. Evans, F.R.C.S.E., aged 67.

HOME.—On the 17th ult., at Mount Æolus, Portobello, A. G. Home, M.D.

KEDDELL.—On the 18th ult., at Aylesford, Wm. F. Keddell, M.R.C.S.E., aged 48.

LEECH.—On the 22nd ult., at Chichester, Edward Leech, M.R.C.S.E., aged 75.

ROBINSON.—On the 22nd ult., at Poplar, Chas. Robinson, Surgeon, aged 70.

SUTHERLAND.—On the 9th of Aug., at Uitenhage, Cape of Good Hope, Wm. Sutherland, M.B., C.M., aged 40.

[N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*]

Notes, Short Comments, and Answers to Correspondents.

THE SELFISH PRINCIPLE AND INFECTIOUS DISEASE.

ONE of the Bristol papers, the *Western Daily Press*, gives Dr. Spencer, of Clifton, Physician to the Infirmary, much praise for betaking himself, or allowing others to take him, as a paying patient to the Bristol Sanitary Authority Hospital, St. Philip's Marsh, when attacked with small-pox, caught from an infirmary patient shortly before the meeting of the British Association, at which Dr. Spencer had to act as President of the Physiological section. Dr. Spencer's example was a good one worthy of being followed. We are glad to think that such action as Dr. Spencer's is becoming increasingly common, and that, in London, at any rate, the better class of patients are increasingly showing their intelligence and their unselfishness by allowing themselves to be removed to the private wards of the London Fever Hospital, where every comfort and convenience is provided, associated with good medical attendance and nursing. The selfish principle is most tested perhaps at the end of infectious diseases, where the patient seeks air and change, and yet where reckless movements on his part involve the carriage of infection and often death, conveyed furtively in cabs or omnibuses or railway carriages, and in hired apartments. There is a law against such movements made recklessly; but it sadly lacks yet the support of the principle of consideration for others.

M. B.—We know nothing of the Office in question, except as advertisers.

ARMY MEDICAL SERVICE.

To the Editor of THE LANCET.

SIR,—By the last mail we learn, amongst other things, that an increase of pay to the officers of the army medical department is contemplated. It is to be hoped, if this prove true, that definite arrangements will be made with the India Office to prevent the absorption of any extra pay that may be granted to us by Royal Warrant.

The Warrant of April 1st, 1807, was received as a great boon by the then assistant-surgeons, who consoled themselves on an increase of 2*s.* 6*d.* a day after each five years of service in lieu of rapid promotion to field officers' rank; but this proved a delusion to those who were destined to serve in India. Surgeons, as a rule, come out to this country after one year's service at home, and remain for five years, return home for two or three years, and again come out for another four or five years. It will be thus seen that they are in India *one* year after the first increase of 2*s.* 6*d.*, and *three* or *four* after the second increase after ten years' service; but it is scarcely credible that these officers do not receive the increase of pay granted to them by Royal Warrant, and the pay of surgeons of the British army in India stands unaltered since before the Warrant of 1807 was published. As our pay in India exists, it is calculated on a wrong basis, and at a rate of exchange utterly ruinous, considering the depreciation in value of the rupee. It appears that the Warrant of 1858 is the basis of calculation, and in turning English money into rupees, half-a-crown is valued at a rupee; whereas, in remitting money for family purposes, the Government value their rupee at 1*s.* 10½*d.* The following table will serve to show more clearly my meaning:

Amount now paid to surgeons of over ten years' service. English pay calculated at 2s. 6d. = 1 rupee.	*r.*	*a.*
English pay at 15*s.* a day ...	152	0
Full batta...	182	10
Gratuity	36	0
Tentage	75	0
Consolidated pay of a surgeon of over ten years' service, monthly...	451	10

Pay calculated from Royal Warrant of 1807. 2s. = 1 rupee.	*r.*	*a.*
English pay at 15*s.* a day ...	228	0
Full batta...	182	10
Gratuity	36	0
Tentage	75	0
Amount a surgeon of over ten years' service considers himself entitled to monthly	518	10

It will be clearly seen that the difference between these two calculations is 67 rupees, which, calculated at its nominal rate of 2*s.* to the rupee, is £6 14*s.* a month, or £80 8*s.* a year—a very large sum to lose by the rate of exchange; but when remitted home at 1*s.* 10½*d.*, utterly ruinous to a married man trying to educate his children.

In explanation of the table, the "full batta" and "tentage" are old institutions granted, according to rank, to all officers in lieu of quarters, coal, candle, and servants, and to enable officers at all times to possess a tent, and be thus independent of the State. The "gratuity" is an additional allowance to enable junior officers to maintain existence. It is plainly shown that the Royal Warrant of 1807 is not acted on in India, and it becomes a question, Are we entitled to ask, each of us, for the amount deducted from our wages since April 1st, 1807? And who is responsible for this breach of faith? Perhaps this may be one cause for discontent in our department.

Your obedient servant,

India, August 21st, 1875. HOPE.

MEDICAL MEN AND QUACK MEDICINES.

A CORRESPONDENT forwards us two remarkable testimonials to the virtues of "Burnet's Female Pills" by Liverpool practitioners. If these testimonials, respectively by Mr. A. Macleffan and Mr. John De Courcy Young, are not genuine, they are disowned the better.

TAVISTOCK DISPENSARY.

To the Editor of THE LANCET.

SIR,—The paragraph in your journal of September 25th is wrong as far as I am concerned. In consequence of the interference of the dispenser, Dr. Crighton resigned; but on September 27th (yesterday) withdrew his resignation.

Yours truly,

Tavistock, Sept. 29th, 1875. R. SLEMAN.

SUPERANNUATION ALLOWANCES.

Union Surgeon.—The law of 1864 is that no officer shall be entitled to such allowance on the ground of age who shall not have completed the full age of sixty years, and shall not have served as an officer of some union or parish for twenty years at least. The Act of 1870, "the Medical Officers' Superannuation Act," secured the application of the earlier law to medical men, *though they might not have devoted their entire time to the service of the parish.* No allowance can be obtained under this Act on the ground of permanent infirmity of mind or body, unless a Poor-law inspector, or some person authorised in that behalf by the Local Government Board, shall have first certified that in his opinion such officer has by reason of such infirmity become incapable of performing the duties of his office with efficiency. As to the amount, it is not to exceed in any case two-thirds of his salary at the time of resigning; but in the estimation of this may be included certain extras, excluding such as he earns in his character of medical practitioner.

Dr. Moore and *Mr. Johnson* (Lancaster) are thanked.

FOOT-AND-MOUTH DISEASE.

To the Editor of THE LANCET.

SIR,—Many of the statements contained in the article on "Foot-and-Mouth Disease" in THE LANCET of September 18th may be disputed, especially those relating to the veterinary department of this country, whose usefulness is only limited by its narrow proportions. It is constituted of one chief, a gentleman of acknowledged talent in his profession, and of a very extended experience, supported by a well-selected staff of scientific, intelligent, and energetic veterinary surgeons, supplemented by a very respectable class of men whose lives have been spent among cattle &c. The intuitive knowledge of these men as regards the detection of the earliest symptoms of disease renders them extremely valuable as auxiliaries to the veterinary inspectors, to whom all suspicious cases are referred. The police, from their perfect organisation in carrying out the correspondence, and enforcing compliance with the orders of the department, combine to form a supervising power in circumscribing the extension of contagious diseases it would be difficult to improve upon were it less contracted in its dimensions.

Veterinary inspection at the port must be admitted to be the best security that the importing country can have, next to its own quarantine. Such inspection must also gradually recoil on the *foas et origo mali*, which is not so amply provided for as it might and ought to be; but, however complete the arrangements for inspection at the source, they would not do away with the absolute necessity for a repetition of it at the point of embarkation.

"Unfairness and oppression" rarely result from the operation of the provisions of the Act in this country; whilst cases of reckless neglect and attempts at blockade running, owing to the vigilance of the department, seldom fail to meet the retribution they so justly merit. My experience during the last three years of the surveillance of the Irish departmental veterinary surgeons in the conduct of their inspectorial duties at the North-wall and other ports in this country convinces me of the enormous utility of their services in preventing the shipment of cattle &c. presenting even the faintest signs of contagious disease, much less those which might be more deeply invaded by infectious lung mischief, many of which would otherwise inevitably be shipped. Their presence has further a very beneficial effect in deterring the unscrupulous in attempting to ship doubtful cases. Too great stress is laid upon the idea "that Irish cattle are a fertile source of the affection"; nor, considering the great numbers exported, is it surprising that after all their travels by road and rail on *both* shores, with the intervening sea passage, many of the outbreaks should be ascribed to their movements, though I am firmly of opinion that the emigrating cattle frequently contract it after their departure from these shores. As the existence of the incubative stage or the presence of the contagium can never be certainly discovered or repressed if known, and as the malady is generally tractable, sure to run a definite course, it appears to me that we may be content to accept such practicable methods regarding its limitation as tend to reduce its dangers to their minimum, and that there is no necessity to resort to German models for the conservation of our public health on the one hand, or the facilitation of our cattle commerce on the other; nor need we pale at the phantom of imaginary contamination, lest in our attempts to clear this Scylla we fall into the Charybdis of a paralysed supply, with the evils which such a deficiency would entail upon our carnivorous population.

As the result of a personal inquiry at the Office of the Veterinary Department of the Privy Council, I beg to append the following information as to the extent of its correspondence, the comparative existence, spread, and diminution of "foot-and-mouth" disease during last week, ending Sept. 19th, 1875:—

Number of communications received by post during week ending Sept. 19th, 1875				3205
Ditto	ditto	ditto	Sept. 12th ...	3828
Number of fresh outbreaks reported during week ending Sept. 19th, 1875				1087
Ditto	ditto	ditto	Sept. 12th ...	2224

Showing a decrease of 241.

N.B.—Outbreaks do not mean individual cases, but farms, lands, premises, or places on which the disease has appeared within the periods set forth, on which many animals became affected. By returns sent in to-day (Sept. 20th, 1875) the disease is reported to have disappeared off 674 farms &c. The above figures show no indisposition on the part of "farmers and others" to screen the existence of the disease.

Each of the communications alluded to contained from six to ten enclosures or separate documents. The number of envelopes sent out to the post on Saturday was upwards of 1400, each of which contained from one to fifty papers; two cabs were filled from floor to roof by the volume of correspondence &c., which amounted to close on 12 cwt. So much for "a few returns, which, even if reliable, are of very little value," according to your contributor.

As an army veterinary surgeon, I may be acquitted of any other motives than public weal and a love of fair play in raising my voice in defence of a very useful but obviously insufficiently appreciated section of my professional brethren, whose position seals their lips, but whose usefulness will stand the test of public criticism.

I am, Sir, yours obediently,

THOMAS PATON,

Dublin, Sept. 23rd, 1875. Veterinary Surgeon, Army Service Corps.

A "VERY IMPRUDENT" ACT.

A LINEN-WEAVER at Leeds was charged at the Police Court of that town on the 24th ult. with what the magistrate, in pronouncing sentence, described as a "very imprudent act." It appeared in evidence that this weaver had had a son who was unfortunately attacked with small-pox, and who died on the 9th of September. It may here be parenthetically remarked that this weaver has, or rather had, five children, not one of whom has been vaccinated, and all of whom have had small-pox; but this is not the "imprudent act" of which he was found guilty. While the son above mentioned was suffering from small-pox, the weaver, like a dutiful father, sat up with the patient at night, but went to his work every day in the same clothes. He was engaged in a linen factory, where he had charge of a room in which sixty girls used to work. The result of the importation of small-pox infection into this factory-room was that at the time of the hearing of the case ten or twelve of the girls were stricken with the disease, and three had already died. The weaver was charged under the 126th section of the Public Health Act, 1875, with having exposed, without previous disinfection, clothing which had been exposed to the infection of a dangerous disorder. He was convicted, and sentenced to pay a fine of £5, or, in default, to undergo two months' imprisonment. This was the offence which the Leeds magistrate described as a "very imprudent act." We must confess that we should have been inclined to describe it in much stronger terms. Perhaps, however, under the circumstances, we ought to feel satisfied that the new Public Health Act contains a clause under which a magistrate, who regards so lightly such an offence as that of which the Leeds weaver was guilty, feels bound to convict.

Podagra.—It can be obtained at Walters', 16, Moorgate-street.

"CHEAP DOCTORS."

To the Editor of THE LANCET.

SIR,—In a note on the dispensary system as applied in private practice, you write disparagingly thereof, and remark that, although there be no written law to the contrary, an unwritten code forbids the system. Something, Sir, is to be said in behalf of the private dispensary system.

A medical man, living in a poor part of town, has to find his account amongst a population ill able to bear *any* charge for medicines and attendance in sickness. The cost of living has certainly not been cheapened of late, nor the struggle for existence eased. A man earns, say 30*s.* per week. Suppose he has four children, not a large family; two have scarlet fever, in one followed by dropsy. What charge for visits and medicines would make this illness unfelt in that family? At 1*s.* 6*d.* a visit, including medicines, the man would be wellnigh ruined, and even at 1*s.* per visit greatly reduced, and that at a time when extras may have to be supplied. Let the "breadwinner" himself be stricken down, and even the 2*s.* 6*d.* or 3*s.* per week of the private dispensary system cannot be paid, and the aid of the parish must be sought, to the impairment of that spirit of independence that political economists seek to keep up, and to the probable increase of the rates.

Again, few medical men who are not poor at the commencement of their career "start" in a working-class neighbourhood, and ready money is to those who do everything, and all losses are avoided. But it is not because a gentleman is poor that he is ignorant, and unable to treat the majority of cases that come under his care cheaply. The cost of most drugs is not overmuch when a few of the more costly are left out, and it is not every case that requires the latest discovered drug or combination of drugs. A large mass of patients is properly treated for syphilis with mercury, mineral acids, or iodide of potassium. Hundreds of cases require only some preparation of iron; and ammonia, the alkalies, bitters, and nux vomica are not expensive; whereas the dearer drugs, as quinine, opium (which latter will go a very long way), are not very ruinous in cost, even when freely prescribed, and I do not believe anyone would fail to give them when required. I have experience of the practice of several gentlemen with dispensaries, and I know they all use quinine largely.

Sir, I hesitated to open an establishment of the kind in question when my receipts were but £5 per week, and when I had to do a lot of work, for part of which I lost the payment. This amount was inclusive of about seventy cases of midwifery in the year. Since I have opened a dispensary I take £16 per week, and have no losses and no midwifery. My health is better, my circumstances are better, and I have more leisure, and I do not plead guilty to having neglected the interests of my patients. Nor can I in any way admit that I have hurt the pockets of my neighbouring practitioners; for I am surrounded with dispensaries, which were in existence before my advent here.

Sir, that unwritten law of which you wrote allows free hospitals and dispensaries, where it is sometimes said highly educated gentlemen of good position give advice for nothing to people who, though they can pay a fee, do not; and if a medical man of the higher grade may work for nothing, and have for patients a class which can afford to pay, why may not another work for a small fee, which is as much as the sick can spare, and which in the aggregate well pays the recipient?

Yours obediently,
London, September, 1875. S.

Dr. R. T. H. Bartley.—We are not competent to give a legal opinion on the question; but it seems to us that Dr. Bartley's title is too special and distinctive to be complained of by the proprietors of Visiting Lists. Rather should they be obliged to him for a valuable addendum and advertisement.

PERIOD OF UTERO-GESTATION.

To the Editor of THE LANCET.

SIR,—The following brief notes of a case which has just occurred in my practice may interest statisticians.

T. B——, in her twenty-seventh year, began to menstruate on Christmas day last. On the 3rd January following she was seduced by her lover, only one intimacy taking place. Labour began on the 23rd inst. about 8 P.M., and was completed by short forceps this day, 25th inst., at 11 A.M. Duration of pregnancy consequently 265 days.

I am, Sir, yours &c.,
Old Kent-road, Sept. 25th, 1875. W. T. GREENE, M.A., M.B., &c.

COLD-WATER INJECTIONS IN TYPHOID.

THE use of cold water in therapeutics, and especially in typhoid, is one of much present interest. Dr. Foltz, of Lyons, has lately published in *Lyon Médical* a valuable series of papers, containing the results of his employment of cold-water injections in typhoid fever. He states that they exert a general and local action. The local action consists in a cooling sensation, accompanied by intestinal contractions. The general action produces slackening of the pulse, marked diminution of temperature, and quietude of the nervous system. It abates thirst, excites the appetite, and increases the secretions. The cooling, sedative, and tonic action is about the same with all injections under 38° (centigrade); but it is so much more intense and durable as the injection is colder, more abundant, and more frequently repeated. As to the therapeutical indications of cold-water injections, Dr. Foltz thinks they are very numerous. Through their local action they are of use in affections of the abdomen, and through their general action in febrile maladies. They are, therefore, doubly necessary in typhoid fever, for the treatment of which they constitute the chief remedy.

Mr. Douglas Lithgow's letter shall be kept in mind.

SCARLET FEVER AT HURDSFIELD (MACCLESFIELD).

To the Editor of THE LANCET.

SIR,—I cannot help thinking that Mr. Leighton Kesteven's letter is calculated to do more harm than good to the cause he advocates.

Hitherto, although much has been written relative to the outbreak of scarlet fever in Hurdsfield, I have refrained from entering into any controversy about it. I still decline to do so; but Mr. Kesteven's letter contains so many inaccuracies that, in justice to you, Mr. Editor, to the Macclesfield Sanitary Committee, and myself, I feel I ought to correct them.

Mr. Kesteven states that when the vicar of Hurdsfield refused to close the school, the scholars at which were suffering severely from scarlet fever, he was acting on the advice of certain medical men, who had signed a memorial to that effect. This is not the case. On the morning of Friday, Aug. 20th, the vicar positively refused to accede to the request of the Sanitary Committee to close his school, and stated that under any circumstances he should keep it open, unless ordered to close by the Education Department. Nothing was then said about any medical memorial; neither was this memorial signed until the following day, when it was generally known throughout the town that the vicar had placed himself in opposition to the sanitary authority. Thus it is evident that the vicar's refusal was not based on the medical memorial, but that he afterwards obtained the signatures to help his case. As Mr. Kesteven places so much stress on the memorial in question, he should in fairness have stated that the signatures of the medical men were obtained solely on the *ex-parte* statements of the vicar, and that, although among other things the memorial certified that the school was in "a good sanitary condition," several of those who appended their names thereto never troubled themselves to ascertain the truth of that statement by a personal examination of the premises; indeed, one medical gentleman has since admitted to me that he never read the memorial before signing it! Against signatures obtained in such a loose way as this, I think we may fairly place your statement, Mr. Editor, which has been endorsed by the whole sanitary press:—"There is not a shadow of doubt that, however originated, the infant school was the focus of disease, and the intercourse of so many children at this infected spot was a source of danger to the inhabitants."

It is not a fact that the sanitary inspector gave such a report on the state of the school as described by Mr. Kesteven, or any other report on the subject. He inspected the school with me, and his opinion was similar to mine as to the choked-up drain, the defective ashpit, and filthy state of the closets, which had never been limewashed since their erection, and were, without exception, the dirtiest I have ever seen attached to a public school. After, however, the vicar had refused to close the school, and after the closets had been limewashed, and the drain laid open, a member of a local firm of surveyors examined and reported on the sanitary condition of the school. The value of a report obtained after the chief causes of complaint had been removed is easily estimated.

The use of the name of Mr. Jas. Bland, and the assumption of a closer degree of relationship than really exists between us, are unwarranted. I may state that Mr. J. Bland, who is a practitioner of forty years' standing, and a J.P., and was for twenty years the medical officer of health, has never interfered in the slightest degree between the sanitary authority and the Rev. Mr. Handcock *ab initio ad finem*.

Mr. Kesteven commences his letter by stating that the vicar of Hurdsfield refused to close his school when requested by the medical officer of health, and concludes with the remarkable statement that no one "could ever assert truthfully" that the vicar "ever did, or could, want to obstruct" the work of the medical officer. The fact is well known that the vicar did obstruct the work of the sanitary authority and their officer of health by refusing to close his school when scarlet fever was epidemic among his scholars. Your correspondent, in attempting to justify the vicar's refusal, admits the "obstruction," and his letter also proves—if it proves anything—that Mr. Handcock was aided and abetted in his resistance to the powers which be by those who ought to have known better.

There are other inaccuracies in your correspondent's letter, which, did your space and my time permit, I might refute; but I will conclude by expressing a hope that when next Mr. Leighton Kesteven addresses your columns, he will previously ascertain the truth of any statements he may make, and that he will not use his pen in attempting to justify ill-advised resistance to the requirements of a sanitary authority.

I am, Sir, your obedient servant,
GEORGE BLAND,
Medical Officer of Health for the Borough of Macclesfield.
Macclesfield, Sept. 27th, 1875.

PHILADELPHIAN DEGREES.

Dr. Walker is thanked for the interesting copy of correspondence which he sends us. He will see that the subject is noticed elsewhere.

Mr. Thomas Q. Couch.—A master is not responsible for payment for medical attendance on his servant in the absence of a special undertaking.

A QUERY.

A CORRESPONDENT wishes to know whether traction after death, such as might be used in dragging a body out of a river, could lengthen it *three* inches. Two men disappear; the height of one is 5 ft. 6 in., of the other about 5 ft. 7 in. or 5 ft. 7½ in. A body is found, so much decomposed as to be unrecognisable, under suspicious circumstances, hands tied &c.; but the body is 5 ft. 9 in. in the recumbent position.

Mr. Boughton Kyngdon. — The advertisement is a disgraceful one. The individual is probably insensible to criticism or reproof.

MEDICAL CERTIFICATES IN CASES OF DEATHS FROM VIOLENCE.

To the Editor of THE LANCET.

SIR,—The author of the article in your impression of Sept. 18th, headed "Medical Certificates in Cases of Deaths from Violence," appears to have written it without bearing in mind two sections of the Births and Deaths Registration Act, 1874. By section 20 it is enacted that—"In case of the death of any person who has been attended during his last illness by a registered medical practitioner, that practitioner shall sign and give to some person required by this Act to give information concerning the death a certificate stating to the best of his knowledge and belief the cause of death." And by section 39 it is enacted that—"Every person who refuses or who fails without reasonable cause to give or send any certificate in accordance with the provisions of the Act is liable to a penalty not exceeding forty shillings."

There is no law in existence which requires a medical man to report to a coroner the death of a patient, occurring under whatever circumstances it may. Had Mr. Lodge's certificate been taken to the registrar of deaths before the man's body was buried that official would have brought the case under the notice of the coroner, who would then, in all probability, have been spared much of the unpleasant duty which has since devolved upon him.

I cannot see that a medical man in giving a certificate of the cause of death of any patient whom he may have attended in his last illness "usurps the functions of a coroner," or that he exceeds his duty in the slightest degree. The course pursued by Mr. Lodge was, I think, strictly in accordance with the last Registration Act, and consequently did not merit the censure of the coroner.

Your obedient servant,
Westbury-upon-Trym, Bristol, Sept. 20th, 1875. HENRY ORMEROD.

*** Our correspondent is mistaken in assuming that our article was written without bearing in mind the two sections of the Births and Deaths Registration Act, 1874, to which he refers in his letter. By section 20, a registered medical practitioner is certainly bound to give a medical certificate showing the cause of death of any person whom he has attended in his last illness. The Act, however, does not specify any particular time when the certificate is to be given, and certainly contains no provision which would prevent a medical practitioner declining to give a certificate in any case in which, in his opinion, an inquest ought to be held, *until* the case has been referred to the coroner. This is the course which we recommended, and believe to be highly desirable on public as well as professional grounds. Our correspondent will excuse us if we express our belief that in nine cases out of ten the medical attendant would be infinitely better qualified than the registrar to decide whether a case was a fit and proper one to be referred to the coroner; and it would be highly objectionable if medical practitioners were called upon to give certificates in cases of violence that would be the subject of inquests, when the certificates would become u eless documents.—ED. L.

Mr. P. B. Giles, Jun.—1. Wilde, Hœning, Ercolani.—2. Dr. Barnes in Medico-Chirurgical Tra sactions, 1851 to 1853.—3. Sir James Y. Simpson's work.

PALLIATIVE TREATMENT OF ULCERS.

To the Editor of THE LANCET.

SIR,—Will you kindly publish the following case, not of curative, but of quite successful palliative treatment of a large, open, offensive cancer.

Pain and the exceeding fetor make the last months of patients who cannot recover most miserable. The lotions &c. usually employed prove troublesome, and of very incomplete effect. It may be that this very simple method is known and practised; but as yet I have not met with any sufficient record of such a case. It has not been suggested by any consulting man my patient has seen; she herself and her friends feeling so marked and so happy a change deserve to be made known to all. The open sore, some nine inches in diameter, is well but most gently washed by a tepid stream of Condy's fluid and water, using syphon and jug. Then it is moistened all over with four or five drachms of a carefully filtered solution of two to three and a half grains of acetate of morphia in fine spray, so used that none leaks off. It is then covered, nothing intervening, with very finely sifted, perfectly dry animal charcoal, the sore being completely covered and concealed. This is done with a pepper or flour dredge or an indiarubber bottle. Over this is placed the very softest light covering, and the patient is clothed so as to be with her friends. Before this was done the smell was very offensive and sickening, not only throughout the room, but in the near passages. Now it can scarcely be perceived at three or four inches from the breast. The use of morphia (Battley's) &c. internally was more distressing than the pain. Now the pain is infrequent and comparatively very bearable; the morphia being used in no other way than by spray.

I am, Sir, your obedient servant,
Forest Hill, S.E., Sept. 21st, 1875. W. RENDLE.

THE LATE DR. WARDROP.

To the Editor of THE LANCET.

SIR,—Can any of your readers kindly inform me of the existence and present residence of any *near* relative of the late Dr. Wardrop, of Charles-street, St. James's? My query has especial reference to any constant visitor or resident (even old housekeeper or butler), who might be well acquainted with his excellent collection of pictures. Dr. W., as is generally known in the profession, died Feb. 13th, 1869, aged 87.

I am, Sir, your faithful servant,
Sept. 29th, 1875. AN OLD SUBSCRIBER.

Old Reader.—An author may certainly give a few copies of a professional work on a special subject to a few non-professional friends and well-wishers without being chargeable with advertising himself or acting unprofessionally. Of course there are subjects so special and scales of distribution so large as would make such a procedure open to criticism.

Carbolic Acid.—If our correspondent will refer to our back numbers, he will find numerous letters on the subject of pruritus ani.

CORONERS AND DOCTORS.

To the Editor of THE LANCET.

SIR,—Your correspondent of the 18th inst., writing under the head of Coroners' Inquests, has brought forward a subject upon which many of your readers would like some advice. The following case occurred in my practice.

On the morning of the 12th August I was sent for to attend M. N——, and requested to hurry, as the child had been born some time. On arrival I found the woman had been delivered of a living child; the pulse was scarcely perceptible; skin cold and clammy—in fact, the patient was dying. The bed was saturated with blood, and in one corner of the room I saw a vessel containing about a gallon of blood clots. On examination per vaginam, I found the funis broken from the placenta, with a small piece of the latter attached; the uterus was large and flabby, filled with clots; and a remarkably tough placenta, which was almost entirely adherent. I removed the after-birth and clots without the least hæmorrhage, gave ergot and stimulants; but there was not the least action of the uterus until the woman died, about half an hour after I arrived. There was a nurse and a midwife in attendance, and from the latter I gained the following particulars. She had seen the patient on the previous day, when she recommended medical advice, knowing that her former labours were very difficult. The woman, however, did not like to have a doctor, nor did she retain the midwife. The latter was, however, sent for in the middle of the night, and on arrival found the child born, great hæmorrhage, and the funis broken. She immediately insisted on medical aid being sent for, thinking that the patient would perhaps not live until it was procured. The nurse in attendance states that "she slept on the bed with the patient, as the pains had left her; she awoke suddenly, found the child born, and the funis broken. Alarmed at the hæmorrhage, she sent for the midwife." After this I refused a certificate; but when the coroner heard the above facts, he said "there was no need whatever for an inquest; such a thing would be quite unusual." I then filled in a certificate, stating particulars to the registrar; but I heard no more of the matter.

Now, Sir, might not this woman's death be brought about by the nurse not attending to her in time, and then trying to detach the placenta by pulling at the funis, and in consequence breaking it? In a case like this (and I fear they occur too frequently) what is a medical man to do when the coroner refuses to hold an inquiry?

I am, Sir, your obedient servant,
September, 1875. AN INQUIRER.

THE BODY OF JEREMY BENTHAM.

A CORRESPONDENT wishes to know where the body of Jeremy Bentham now lies.

CONVALESCENT HOMES, AND ONE OF THEIR GROSS ABUSES.

To the Editor of THE LANCET.

SIR,—I was lately applied to by a young man (who is in a Benefit Society), asking if I would kindly give him a certificate for the Convalescent Home of Mrs. Ruster, of Dover. He had not been under my treatment, nor under the treatment of any other medical man, nor had he been suffering from any illness whatever; his only complaint being want of a holiday at the seaside. He could get a recommendation from the Rev. Mr. Bromfield, of the parish of St. Mary-the-Less; this would be available for a month. However, as he had but a week's holiday, he only intended to remain for that period in the Home. Of course I need scarcely add that I refused him a certificate. He seemed very much annoyed, and said he was down at the same Home last summer, under precisely similar circumstances, for a period of a fortnight, obtaining his letter from the same source. He stated that there were several people there under similar circumstances. He also added that they dined with the female *convalescents*, and went out for nice rambles and walks with them, and that he enjoyed his holiday very much indeed. He paid a reduced railway fare of 5*s.* for the return journey, and was fed and lodged in the Home for 9*s.* a week.

Need we wonder at the great difficulty there is in finding room for our poor convalescents when their beds are occupied by holiday-makers.

I am, Sir, your obedient servant,
September, 1875. ALBERT S. MORTON.

"PENETRATING POWER OF SALT."

To the Editor of THE LANCET.

SIR,—Having read in your last issue "A. B.'s" account of the penetrating power of salt, I determined to try the experiment for myself. I accordingly left a strong solution of salt and water standing all night in a ware jug, *glazed both inside and out*, and in the morning found the outside of the jug quite *free* from the crystals of common salt—in fact, just as it was overnight. Had your correspondent's jug a crack in it? I should like to ask—1st. Supposing "A. B.'s" experiment to elucidate a physical fact, is this quality of the salt properly called its *penetrating power*? 2ndly. Can we take the "great power of penetration" of a drug as a means of estimating its "value as a local remedy in cases of gout, rheumatism, &c."?

I am, Sir, yours respectfully,
September, 1875. SAL NON-PERMEANS.

STRYCHNIA POISONING.

To the Editor of THE LANCET.

SIR,—I have just read Mr. Lamniman's letter in your last number about a case of strychnia poisoning.

I once took an overdose of liq. strychniæ, which would certainly have been fatal, as the spasms were becoming more frequent and stronger, one lifting me in the air and throwing me prostrate on the ground. I immediately took chloral hydrate in two half-drachm doses, one within ten minutes of the other. I began instantly to get well, each dose having great effect.

Yours &c.,
September, 1875. M.R.C.S.

CHEAP DOCTORS.

THE following is an illustration of what we said last week on this subject. Could the Colleges, whose titles Mr. Timothy advertises in such an objectionable way, not remonstrate with him?

"Dalkeith-street, Barrow-in-Furness.

"INDEPENDENT DISPENSARY.—This dispensary was opened by Mr. Timothy, L.R.C.P. Lond., M.R.C.S. Eng., L.M.R.C.S., and L.S.A., to afford medical and surgical relief to the working classes. Attendance every morning from nine to twelve, and every evening from six until nine. To meet the working expenses, the charge for each patient will be sixpence. The charge includes advice, medicine, and every other requisite. A visit to any dispensary patient within the town will be one shilling."

Dr. W. A. Jamieson.—1. Mr. S. Jeffery, Superintendent, Kew Gardens.—2. About 2*s.* 6*d.*

SOFT CHANCRES.

To the Editor of THE LANCET.

SIR,—I have been very much struck with the following sentences in Mr. Hutchinson's lecture on the above subject, as reported in your impression of the 18th inst., and cannot help directing attention to them. "Thus," says Mr. Hutchinson, "if you could to-day exterminate soft sores, and destroy all the secretions capable of producing them by contagion, you must expect in a few weeks again to find them reproduced. If, on the other hand, you could destroy all hard chancres, and all the specific germs of syphilis, there would be no reproduction of the disease." Are we to infer from these assertions that Mr. Hutchinson is a believer in *the special creation of a syphilitic virus?* I am &c.,

September, 1875. D. CAMPBELL BLACK.

COMBINED SANITARY DISTRICTS.

A CORRESPONDENT writes to us as follows:—

"Allow me to correct an error in your last week's issue. The combined sanitary district of Peterborough, Whittlesea, &c., is not a new district, it being formed at the commencement, two years ago. The salary was then £300, and Huntingdon and Godmanchester were in it; but these places (and I believe others) have seceded, and one has joined, so reducing the salary to £230. The appointment was made last May for this year; but was, I am told, informal, inasmuch as it was made without advertising the vacancy."

COMMUNICATIONS not noticed in the current number will receive attention in our issue of the ensuing week.

COMMUNICATIONS, LETTERS, &c., have been received from — Dr. R. Barnes, London; Dr. Lockhart Robertson; Dr. Sedgwick Saunders, London; Mr. Fairlie Clarke, London; Dr. Adam, Liverpool; Mr. R. Smith, Winchester; Mr. Sleman; Dr. Gill, Clapham; Mr. Price, London; Dr. Payne, London; Mr. Watkins, Worcester; Mr. Murray, London; Dr. Wiltshire, London; Mr. Tait, Birmingham; Dr. Walker, Anerley; Dr. Sutcliffe, Torrington; Mr. Reeves, London; Dr. Cripps, Cirencester; Dr. Faber, Freudenstadt; Dr. G. Bland, Macclesfield; Mr. J. Jones, Llanfyllin; Mr. Hardman, Blackpool; Mr. Crane, Bristol; Mr. R. Garnett, Brixton; Dr. Haviland, Northampton; Mr. Collins, Chepstow; Mr. Waren Tay, London; Mr. Scott, Wolverhampton; Mr. Wilson, Bawtry; Mr. T. Lylei, Dalston; Mr. Green, London; Mr. Barnett, London; Dr. A. Gamgee, Manchester; Mr. West, Tavistock; Dr. Black; Dr. Haughton, London; Dr. Moore, Dublin; Mr. Williams, Barrow-in-Furness; Dr. Francis; Mr. Mortimer Granville; Dr. Moore, Lancaster; Dr. Truman, Nottingham; Dr. Gairdner; Mr. Lee, New College, Oxford; Dr. Denton, Bridlington; Mr. R. Davy; Dr. Carson, Portrush; Mr. Douglas-Lithgow, Wisbeach; Mr. Williams, London; Dr. Randall, London; Mr. Vaughan, Denbigh; Mr. Robinson, Ditchling; Dr. Stevenson, London; Mr. Tivy, Cork; Mr. Fleming, Chatham; Mr. Paton, Dublin; Dr. Linton, Birkenhead; Mr. Bartley, Weston-super-Mare; Messrs. Silcox and Co., Hull; Dr. Stewart, Blackburn; Mr. Hudson; Mr. Wright, Liverpool; Mr. Bower, Inverkeillor; Dr. Jamieson, Berwick-upon-Tweed; Mr. Stedman, London; Mr. B. Kyngdon; A. G. Zoette; Old Reader; F.R.C.P.; Podagra; T. M. E.; Sal Non-permeans; R. W.; M.R.C.S.E.; M.D., L.R.C.P.; E. C.; Sigma; C. F. H.; An Old Subscriber; M. B.; A. Z.; Carbolic Acid; Medicus, Hull; &c. &c.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Cameron, Salen; Mr. Sims, Glasgow; Dr. Clouston, Edinburgh; Mr. Evans, Liverpool; Dr. Cochran, Port Patrick; Mr. Roocroft, Wigan; Dr. Easby, Darlington; Mr. Marshall, Moulton; Dr. Tuke, Falmouth; Mr. Braund, Stratton; Dr. Fox, Widford; Mr. Izod, Esher; Mr. Walshe, Aldborough; Mr. Pletts, Ryde; Mr. Faulder, Stockport; Lieut. Bourchier, Brighton; Dr. Cotterell, New Zealand; Mr. Paulson, Mountsorrel; Dr. Blake, Reigate; Mr. Satchell, Tunbridge Wells; Dr. J. Smith, Shanklin; Mr. Morgan, Llanelly; Mr. Symons, Dumfries; Mr. Davidson, Birkenhead; Dr. Fraser, Clitheroe; Mr. Taylor; Dr. Campbell, Swindon; Dr. Taylor, Colston Bassett; Mr. Cooper, London; Dr. Gowan, Edinburgh; Dr. Everitt, Worcester; Mr. Bowes, Herne Bay; A. Z., Amersham; Medicus, London; H. W., Amersham; P. O., Ballendalloch; Alpha, Bridlington; Medicus No. 3; Z. A., Dorchester; Medicus, York; B., Morriston; Alpha, Harwich; F. K.; Medicus, Kendal; M.D., Ashford; Delta; M.D., South Shields; A. F., South Shields; Medicus, Beaumaris; A. B., Rhymney; M. B., Barnsley; Cecil; Rex, Saxmundham; A. B., Leek; Chirurgicus; Medicus, Leicester; Chirurgus; P. E. M.; S., Romsey; M.D., London; C. R., London; Commodious, London.

Tavistock Gazette, Newcastle Chronicle, Melbourne Argus, Welshman, Manchester Guardian, Western Morning News, Glasgow Herald, Surrey Advertiser, East London Observer, Cork Constitution, Huddersfield Chronicle, Tower Hamlets Independent, Liverpool Post, and *Rotherham Independent* have been received.

METEOROLOGICAL READINGS

(Taken by Stewart's Instruments).

THE LANCET OFFICE, SEPT. 30TH, 1875.

Date	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb	Solar Radia in Vacuo	Max. Temp. Shade	Min. Temp	Rain-fall	Remarks at 8 A.M.
Sept. 24	30·15	S.E.	53	55	72	62	53	0·61	Overcast
,, 25	29·86	S.W.	61	62	95	69	54	0·21	Raining
,, 26	29·97	S.W.	58	61	82	67	54	0·19	Cloudy
,, 27	29·70	W.	51	55	99	66	52	...	Cloudy
,, 28	29·77	W.	55	58	77	63	54	0·12	Overcast
,, 29	29·85	W.	49	51	95	65	48	0·03	Cloudy
,, 30	30·03	N.W.	50	53	...	...	50	...	Overcast

Medical Diary for the ensuing Week.

Monday, Oct. 4.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.
ST. MARK'S HOSPITAL.—Operations, 9 A.M. and 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

Tuesday, Oct. 5.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.

Wednesday, Oct. 6.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at 1½ P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.
LONDON HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.
OBSTETRICAL SOCIETY OF LONDON.—8 P.M. Dr. Geo. Roper, "On Prolapse of the Funis during Labour."—Dr. Galabin, "On the Occurrence in Normal Labour of Lateral Obliquity of the Fœtal Head."—Dr. Heywood Smith: "Notes of a Case of Ruptured Vagina during Labour, with Recovery."—Mr. P. H. Gervis: "Report of a Case of Inversio Uteri."—And other communications."
ROYAL MICROSCOPICAL SOCIETY.—8 P.M. Dr. C. T. Hudson, "On a New Species of Melicerta."

Thursday, Oct. 7.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.

Friday, Oct. 8.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
CLINICAL SOCIETY OF LONDON.—8½ P.M. Mr. Brudenell Carter, "On the Operation of Iridectomy as performed for Optical purposes."—Dr. Southey, "On a Case of Idiopathic Tetanus."

Saturday, Oct. 9.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

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